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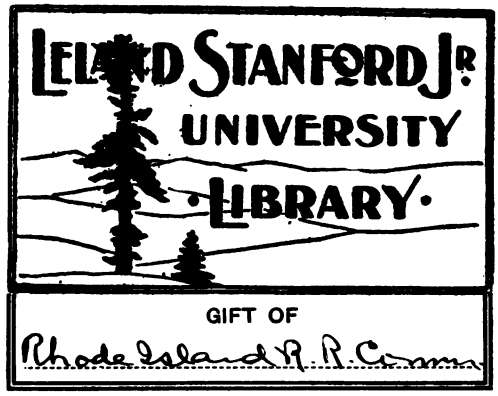
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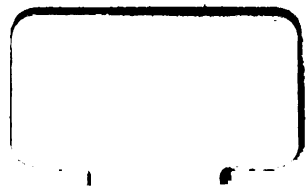

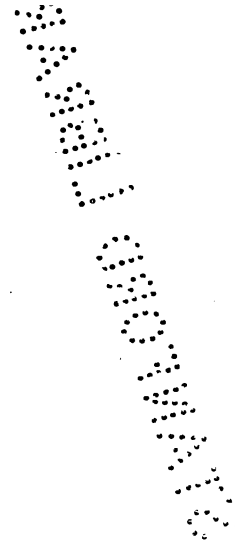

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State of Rhode Island and Providence Plantations.

ANNUAL REPORT

OF THE

RAILROAD COMMISSIONER,

FOR THE YEAR ENDING DECEMBER 31,

1894,

MADE TO THE

GENERAL ASSEMBLY,

AT ITS

JANUARY SESSION, 1895.

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ANNUAL REPORT.

To the Honorable General Assembly of the State of Rhode Island:

GENTLEMEN:—In accordance with the provisions of Section 6, Chapter 758 of the Public Laws, it is made a part of the duty of the Railroad Commissioner to present a report to the General Assembly, at its adjourned session in Providence, of the condition and proceedings of the several railroad corporations organized or doing business in the State, so far as the public interest may demand, with such suggestions and recommendations as he may deem expedient. In compliance therewith I respectfully present the following report.

The returns of the several corporations, are made, as required by law, up to the 30th of June, 1894; these returns will be found in full in the Appendix to this report, with tables compiled from said returns, giving the principal statistics up to that date. As the General Assembly does not convene until the last of January of the year succeeding the date of these returns, and as many matters of interest arise subsequent to the date of the returns, my general report comprises the year from the 1st of January to the 31st of December, 1894.

The general railroad business of the United States for the year has been very unsatisfactory, both to bond-holders and stock-holders, though there has been a marked improvement in the last few months. The number of miles of railroad constructed has been

less than that of any year since the war, only 1761 miles of main line having been built; in Canada, 253 miles, and in Mexico 40 miles. This in itself might not be disadvantageous to existing roads, were it not that it is but an index of the general business depression that prevailed so extensively during the latter half of 1893 and the first half of 1894, and from which the country is but just recovering.

The returns to the Interstate Commerce Commission from 570 operating companies whose reports were filed on or before November 23, 1894, cover the operations of 149,559 miles of line, or 85 per cent. of the total mileage of the United States.

The gross earnings from the operation of the 149,559 miles of line represented were $949,639,075, of which $309,137,142 was from passenger service, $617,598,498 was from freight service, and $22,420,298 was other earnings from operation, covering receipts from telegraph, use of cars, switching charges, etc. The operating expenses were $643,428,331, leaving net earnings of $306,210,744. Reduced to a mileage basis, the earnings from passenger service were $2,067 per mile of line; from freight service, $4,132; total gross earnings, $6,350; operating expenses, $4,302, and net earnings, $2,048. A comparison of these items with similar results from the complete report of the previous year shows a decrease per mile of line in earnings from passenger service of $53, in earnings from freight service of $774, in total gross earnings of $840, in operating expenses of $574, and in net earnings of $266.

The number of passengers carried was 505,285,446; passengers carried one mile, 12,889,936,578. Number of tons carried was 571,955,942; tons carried one mile, 70,426,344,965. The number of tons carried one mile per mile of line was 470,893, as compared with 551,232 for 1893. These figures show the decrease in the volume of freight traffic occasioned by the demoralization of business throughout the country.

The net earnings available for the payment of fixed charges and

dividends were $300,210,744, as against $350,766,607 for the same roads for the previous year, a decrease of $44,555,863. It is probable that the decrease in net earnings of all the railways will exceed $50,000,000. The dividends paid were $62,464,961, as compared with $66,364,130 for 1893. After the deduction of dividends it is found that there is a deficit of $29,032,621. This fact shows that a part of the dividends was either paid out of the accumulated surplus of past years, or that their payment necessitated an increase in the current indebtedness.

The report also shows the average receipts per passenger per mile, and the average receipts per ton per mile, for the year ending June 30, 1894, covering the mileage represented. Regardless of the decrease in traffic there has been a decline in rates during the year, the average receipts per passenger per mile being 1.976 cents, as compared with 2.108 cents in 1893, and the average receipts per ton per mile .866 cent, as compared with .878 cent in 1893.

The fact that railway investments are generally far from being profitable, at least to stock-holders, is shown very conclusively by the fact that in the last eighteen years, 549 roads, aggregating over 57,000 miles, nearly one-third of the present mileage of the country, have gone into bankruptcy and been sold for debt, at the enormous loss of $3,176,000,000.

In addition to this came the great railway strike ordered by the American Railway Union, known as the Pullman strike, which commenced June 26, 1894, and before it was suppressed by the United States authorities, cost the railroads, the employés, and the general public a sum almost fabulous in amount. Millions of dollars worth of property was destroyed, many lives were lost, business was subjected to many losses occasioned by the interruption of the freight traffic and the public comfort greatly disturbed.

Nearly all the incorporated railroads in this State are leased to

other roads, and as the rentals have generally been promptly paid, the usual dividends have been declared, and the stock-holders have suffered but little, if any, loss. The operating roads have felt the depression considerably, but they reduced expenses by cutting off trains that they thought could be spared, discharged some employés, etc., and thus succeeded in preventing any very great loss in net earnings. The latter half of the year, however, has shown a great increase in passenger traffic, while the freight business has developed so fast as to require very many special trains; the capacity of some of the roads has been severely tested, and large orders for rolling stock, including many freight cars of improved patterns, have been placed. The prospect for the present year for a great increase of business, both passenger and freight, is very encouraging.

SUMMARY OF STATISTICS.

STEAM ROADS.

The number of Railroad Corporations organized under the laws of this State is eighteen, two more than at the time of the last report. The new corporations are the Providence, Ponagansett & Springfield Railroad Co., which took out its charter on the 16th of February, 1893, but nothing has yet been done towards building the road. Mr. Franklin A. Smith of Providence was Treasurer at the time the charter was taken out, but no report from the corporation has been received at this office.

The Cowesett Terminal & Transportation Co. took out their charter April 18, 1894, and organized by electing Hon. Enos Lapham, President, and Moses Fifield, Treasurer. The capital stock of this road is $300,000, and it proposes to start from deep water at Oakland Beach and then run up the Pawtuxet Valley through the towns of Warwick and Coventry, connecting with the New York & New England R. R. at some point not yet determined. The death of Hon. Enos Lapham has been a great drawback to the

work, as he was a strong supporter, and believed that there was a demand for such a road and that it could be made successful. There are, however, some energetic business men interested in the undertaking, and they may push it to completion. But thus far the route of the road has not been definitely decided upon.

PROPERTY.

The capital stock of the roads is $85,527,375. Miles of road owned and operated, 2,515.785; miles of road in this State reckoned as single track, 465.805. They own 888 locomotives, 1,932 passenger train cars, and 18,190 freight cars.

These figures show an increase in capital stock over last year's report of $5,608,825; decrease in locomotives, 3; increase in passenger cars, 42; increase in freight cars 233, and increase in single track in this State, 69.77 miles.

The total property and assets of the corporations is reported as $147,280,397.02, which is $4,056,317.62 over and above the total amount of their capital stock and funded and floating debt. This shows an increase in property and assets of $10,756,698.50.

INDEBTEDNESS.

The funded debt of all these corporations is $49,519,936.04; the floating debt is $8,176,768.36; total indebtedness, $57,696,704.40. Compared with last year's report, these figures show an increase in the funded debt of $7,497,413.54; an increase in the floating debt of $799,284.12; or a total increase in indebtedness of $8,296,-697.66. The increase in property and assets is therefore $2,460,000.84 more than the increase in indebtedness.

DIVIDENDS.

Dividends were declared by nine of the corporations; three did not earn sufficient to pay operating expenses and fixed charges, while one earned a trifle over its expenses, but not enough to pay

a dividend. Of the nine roads which declared dividends, eight were leased roads, and the dividends were paid from rentals received. Dividends were declared as follows:

New York, New Haven & Hartford, 10 per cent.
Providence & Worcester, 10 per cent.
Boston & Providence, 10 per cent.
Pawtuxet Valley, 7 per cent.
Old Colony, 7 per cent.
Providence, Warren & Bristol, 5 per cent. on the common, and 5 per cent. on the preferred.
New York & New England, no dividend.
Rhode Island & Massachusetts, 2½ per cent.
Woonsocket & Pascoag, 5 per cent.
Narragansett Pier, 3 per cent.
Newport & Wickford R. R. & Steamboat Co., no dividend.
Wood River Branch, no dividend.
Moshassuck Valley, no dividend.

RATES OF FARE.

The rates of fare for local tickets range from 1.94 cents to 6.25 cents per mile, this rate is charged on one short road; commutation tickets range from one-half cent to three and one-half cents per mile, with the average about two cents per mile.

PASSENGERS.

The total number of passengers was 52,826,331, a loss as compared with last year of 4,921,875. The New York, New Haven & Hartford R. R., and its leased lines, carried 3,962,406 less passengers, and the New York & New England, and its leased lines, carried 978,388 less passengers. The only roads that reported an increase in the number of passengers carried were the Newport & Wickford, and the Narragansett Pier. Probably a portion of the decrease in passengers carried is attributable to the extension of

street railways and the use of electric cars, but the larger part of this decrease must be accounted for by the long continued depression in business.

MERCHANDISE.

The total number of tons merchandise transported was 11,811,582 tons; this was a decrease of 2,724,887 tons. Every road showed a decrease, except the Narragansett Pier; the decrease on the New York, New Haven & Hartford R. R., and its leased lines, was 2,165,308 tons, and on the New York & New England and its leased lines, 557,664 tons. These figures show very plainly the diminution in business caused by the shutting down of manufactories.

PERSONS EMPLOYED.

The average number of persons employed in this State was 2,087; this is a decrease of 247 from number reported last year.

RECEIPTS AND EXPENDITURES.

The total receipts from all sources were $33,990,069.77; expenditures, $30,359,762.68; net earnings, $3,630,307.09. As compared with previous years these figures show a decrease in receipts of $2,189,876.68; a decrease in expenditures of $474,023.40, and a decrease in net earnings of $1,715,853.28.

The receipts of the operating roads were from passenger departments $16,812,875.41; from freight departments, $13,597,638.70; from mails, express, etc., $3,579,555.66.

ROLLING STOCK.

The rolling stock generally is in good condition; there were $397,574.30 expended for new rolling stock, and $2,156,054.46 for repairs. All of the 1,932 passenger train cars have automatic brakes, and of these 1,381 are equipped with the improved quick acting pattern. Of the 888 locomotives 735 are equipped with driver brakes. Of the

18,190 freight cars only 1,652 are furnished with automatic train brakes, and 4,324 with automatic couplers.

HEATING OF CARS.

The number of cars heated by direct steam from locomotives is reported as 878; by steam heaters, 1002; so far as reported none are heated by stoves. The use of direct steam, where proper attention is paid to the temperature and to the ventilation, is by far the most efficient and agreeable method of heating passenger cars, and has steadily grown in favor with the traveling public. It seems somewhat strange that it is but a few years ago, when it was asserted in the most positive manner, that it would be a mechanical impossibility for a locomotive to make steam enough to heat a long train and draw it at the same time. It was also asserted that even if it could be done, it would be a very dangerous method of heating, as in case of a smash-up, there would so much steam escape from the broken pipes as to kill or seriously injure all the passengers in the car. Then, too, the cars could not be heated in the stations until the locomotive was attached, which would be a great inconvenience and positive discomfort to the passengers. All these imaginary evils have failed to materialize, and heating by direct steam from the locomotive is not only the most satisfactory to passengers, but, when all things are taken into account, the most economical of all the plans proposed.

BRIDGES.

The number of bridges of all kinds reported is 252. Of these 157 are constructed of wood, 71 of iron, 21 of stone, and 3 are combination. The bridges are all apparently in good condition, and are carefully watched and inspected by the companies, and where any indication of weakness is found the necessary repairs are made. Several wooden bridges will be replaced by iron during the coming season.

ACCIDENTS.

The returns made by the companies for the year ending June 30, 1894, show that in this State 1 passenger was killed, and 11 injured; that 6 employés were killed, and 46 injured; that 2 persons were killed, and none injured at grade crossings; that 21 trespassers, or persons walking on or crossing the tracks, were killed, and 10 injured; that 1 person was killed, and 5 injured while getting on trains while in motion, and that 1 person was injured by falling from train.

As compared with returns made last year, these figures show the number of passengers killed was 1 less, and the number injured 11 less; that the number of employés killed was 3 less, and the number injured 23 less; the number of persons killed at grade crossings was 9 less, and the number injured 10 less; and the number of persons killed while walking upon or crossing the tracks was 8 more, and the number injured 10 less. To sum up there were 31 deaths, and 73 cases of injury more or less severe.

ACCIDENTS DURING THE YEAR 1894.

The following detailed statement gives all the accidents that have been reported by the officials of the steam railroads as having occurred in this State during the year 1894, though the report received by me from the R. I. Hospital shows nine persons have been treated there for injuries received on the railroads of this State of which no report has been made to me by the several railroad officers.

There were 93 accidents, in which 105 persons were killed or injured. There were 38 deaths resulting from these accidents. Of the cases where death ensued, 24 were persons who were walking on or crossing the track; 9 were employés; 3 were at grade crossings; 2 were passengers. Of the employés that were killed, 5 fell from cars; 3 were standing on track; 1 was struck by

bridge. Of the passengers that were killed, 1 was getting upon a train that was in motion, the other jumped from moving train.

Of the 67 persons injured, 49 were employés; of these 27 were injured while coupling cars; 10 by collision of trains; 9 fell or were knocked from cars; 2 were hit by overhead bridge; 1 was struck by tell-tale. Four passengers were injured; 2 by collision; 1 while attempting to get on moving train, and 1 by jumping from car in motion. Of the other 14, 7 were injured while walking on the track; 1 at a grade crossing; the others in various ways.

As compared with last year's report, the number of passengers killed was 3 less; the number injured, 15 less. The number of employés killed was 3 more, the number injured, 4 more. There were 4 more persons killed while walking on tracks, and 2 less injured. There were 6 less killed at grade crossings, and 8 less injured.

It is noticeable that the two passengers that were killed were themselves wholly to blame; of the three persons killed at grade crossings, two were themselves wholly responsible for the occurrence, as in both cases they went under the closed gates, and in opposition to the warning of the flagmen.

Jan. 3. G. Griew, a brakeman on New York & New England R. R., while coupling freight cars at Pascoag, was caught between the drawbars, and had his left hand crushed.

Jan. 4. George Gardiner, conductor, while coupling freight cars in India Point yard, Old Colony System, was run over by flat car and received compound fracture of left leg. He was taken to the R. I. Hospital.

Jan. 13. William Jenkins, a teamster, while unloading sash from a freight car, in yard of Old Colony System at Pawtucket, was thrown from car by reason of another car colliding with it. Both legs were run over by one wheel. He was taken to the R. I. Hospital, and died the same day.

Jan. 29. John Kelley, freight brakeman, Stonington Division,

while at work on a hot box, at the Kingston station, was struck by train No. 40, which approached without his perceiving it, and instantly killed.

Feb. 1. Thomas McKiernan attempted to get on an empty passenger train that was backing into the station at Providence, but failed, and was struck by train 1444, which was hauling out. He received severe cuts and bruises, and was taken to the R. I. Hospital; discharged Feb. 23, cured.

Feb. 6. The body of John Maxwell was found in the ditch by the side of railroad track, near Greenwood station, Stonington Division. He had been struck by some train, while walking on the track and killed.

Feb. 21. Robert S. Whipple, brakeman on Worcester Division, while coupling engine to car, in Pawtucket yard, had his left hand caught, one finger was broken and others bruised.

Feb. 27. Michael Dower, of Providence, attempted to pass between two cars of freight train No. 452, at Brayton's avenue, Stonington Division. The train started and his foot was caught between cross-bars and crushed. He was taken to the R. I. Hospital; discharged April 9, cured.

March 9. James Gormley, of Woonsocket, was found on the platform of station at Oakland, N. Y. & N. E. R. R., with his left leg cut off above the ankle. He said he was walking on track, got his foot caught in a frog and was run over. He was taken to the R. I. Hospital.

March 9. John Oberly, of Woonsocket, while walking on the tracks of Worcester Division in the East freight yard, Providence, was struck by passenger train and his skull was fractured. He was taken to R. I. Hospital; discharged April 13, cured.

March 15. Fred. Montville, freight brakeman, Worcester Division, while coupling cars, in yard at Woonsocket, had his hand caught between dead-blocks and crushed.

March 26. John Dahl, while walking on track near Orms street bridge, Providence, was run over by Old Colony switching engine, No. 3, and instantly killed. He was intoxicated at the time, and had been led off the tracks a short time previously.

March 30. John B. Brown, freight brakeman, Stonington Division, was thrown or fell from the top of caboose. He went under wheels of car and was instantly killed.

March 30. Ernest La Traverse, brakeman, was thrown from top of freight car by sudden stopping of car, in yard of N. Y. & N. E. R. R., at Woonsocket, and received severe injuries.

April 4. Homer Honde, brakeman, while coupling cars in freight yard of N. Y. & N. E. R. R., at Woonsocket, had his right hand caught between dead-woods and crushed.

April 11. John Anderson, track hand, Old Colony System, while cleaning out switches at Horton's Grove, stepped aside to avoid a south-bound train and was struck by north-bound train, 1477, and instantly killed.

April 13. Alex De Sautel, while watching a wrecking crew of the N. Y. & N. E. R. R., at work near Woonsocket, was struck by the end of a chain which broke, and his hip was severely bruised.

April 18. David Clark, freight brakeman, Worcester Division, while riding on top box car near Darlington station, was struck by a telephone wire which crossed the tracks, and was knocked down on top of car. He was severely cut about nose and eyes.

April 20. Thomas Gleason, while walking on track of Worcester Division near Manville station, was struck by mail-bag, thrown out by mail clerk, and somewhat injured. He was taken to the R. I. Hospital.

April 23. John Fallon, while lying in a drunken stupor on tracks of Stonington Division, near Bellefont station, was struck by train No. 494, and his right leg broken. He was taken to the R. I. Hospital; discharged July 30, cured.

April 28. James Nelligan, of Whipple, while stealing a ride from Woonsocket, on the N. Y. & N. E. R. R., fell between the cars at Harrisville and was run over. He was taken to the R. I. Hospital where he died the same day.

May 3. Charles Prince, freight brakeman, Stonington Division, while riding on box car, was struck by bridge, No. 107, and knocked senseless. He was taken to his home at New London, Conn.

May 3. W. C. Russell, freight brakeman, Stonington Division, while coupling cars in freight yard, Providence, had his fingers caught and crushed.

May 4. Archie T. Frazier, engineer on train No. 88, N. Y. & N. E. R. R., jumped from the engine just before it struck the rear end of train No. 134, near Riverside switch. He received severe bruises, and was taken home.

May 6. Train No. 22, Stonington Division, ran over and instantly killed a man who was walking on the track under Broadway bridge, near Olneyville. His remains were not identified. He was an elderly man ; probably an Italian laborer.

May 7. William E. Snyder, freight brakeman, while coupling cars, in yard N. Y. & N. E. R. R., at Providence, had his hand caught and fingers smashed. He was taken to the R. I. Hospital ; discharged June 2, improved.

May 9. Train No. 29, Old Colony Division, struck and killed a man who was walking on the track near Pleasant View station. The remains were not identified.

May 11. Robert Downey, an employee, Providence Division, while braking on freight train near India Point, Providence, fell from car and was run over, receiving injuries from which he died at the R. I. Hospital the same day.

May 24. Patrick Kennedy, while walking on tracks of Worcester Division near Lonsdale, was struck by train No. 1442, and escaped with slight injuries.

June 8. The body of George Beresford, a resident of Carolina Mills, was found on the tracks of Stonington Division near Carolina station. He was probably struck and killed by train No. 56.

June 9. Dennis Berry, of Providence, freight brakeman, N. Y. & N. E. R. R., while coupling car to engine had his hand caught and crushed. He was taken to the R. I. Hospital; discharged June 11, improved.

June 12. Passenger trains, 36 and 53, on N. Y. & N. E. R. R., collided about one-quarter of a mile west of station at Stillwater. Both trains were running at about 12 miles an hour. The rolling stock was considerably damaged. Two passengers were slightly injured, and eight employés were injured. John Zwahl was taken to the R. I. Hospital, where his leg was set, and he was discharged October 6, improved. An investigation showed that the collision was caused by the mistake of the telegraph operator at Stillwater. The order was received for the trains to pass at Stillwater, but it was copied Smithfield, and the order given to the conductor accordingly.

June 16. Frank Mulhall, of Providence, brakeman on N. Y. & N. E. R. R., while putting wedge between engine and tender, got his hand caught and severely crushed.

June 18. William Vickery, brakeman on Providence Division, was struck by tell-tale near Branch Avenue bridge and severely injured, about the head and neck. He was taken to the R. I. Hospital.

June 18. Frank Whalen, freight brakeman on Providence Division, while coupling cars in Providence had his right hand caught and lacerated. He was taken to the R. I. Hospital; discharged June 21, improved.

June 20. Aaron Schenck, while walking on the tracks of the Worcester Division, near the Woonsocket water works, was struck

by passenger train No. 1460 and killed. He was 70 years old and on his way to the Soldiers Home at Bristol.

June 20. Edward J. Hayes, Baggagemaster, Old Colony System, while coupling car to engine had his left hand caught and crushed, requiring the amputation of three fingers.

June 23. Edward Cassidy, freight brakeman on Stonington Division, was struck by Broadway bridge, Providence, and died in a short time.

July 2. J. McCarthy attempted to drive his team across the tracks, in front of switching engine, in freight yard at Providence, but was struck by engine. His right leg and both arms were severely bruised.

July 3. Dennis Sullivan, brakeman on Moshassuck Valley R. R., while coupling cars in yard at Saylesville, had his hand caught and thumb crushed.

July 4. Patrick Donahue, section-hand on Old Colony System, while attempting to get on moving train, was struck by shed opposite Charles street engine-house, knocked from car, and his left arm was run over and broken. He was taken to the R. I. Hospital; discharged July 18, cured.

July 7. Frank Marshall, while walking on track of Old Colony System, near the center of "tin bridge" at Central Falls, was struck by train No. 79 and killed.

July 12. John Russell alias Alexander Wilkinson, while walking on tracks of Old Colony System, at "tin bridge," got caught between the railings of the bridge and train No. 107, and received injuries that proved fatal, at the R. I. Hospital, the next day.

July 13. A. C. Marshall, while walking on tracks of Stonington Division near Apponaug, was struck by train No. 79, and one arm was broken. He was taken to the R. I. Hospital; discharged July 18, improved.

July 27. Peter Hanley, of Providence, 17 years old, attempted to cross the tracks of the Stonington Division near Sabin street crossing, but was struck by train No. 506, and instantly killed.

July 28. Thomas Cawley, while searching for a watch chain on the tracks near Woodlawn station, stepped in front of train No. 121, Old Colony System, and was instantly killed.

July 31. A man, whose name could not be ascertained, while walking on tracks of Worcester Division, near station at Albion, was struck by passenger train No. 1412 and instantly killed.

July 31. Wm. M. Eastman, freight brakeman on train No. 471, Stonington Division, while switching cars at Auburn, was thrown from car by breaking of the brake chain and run over, his right leg crushed. He was taken to the R. I. Hospital, where he still remains.

July 31. Thomas Hughes, freight brakeman on train No. 1464, Worcester Division, while coupling cars near Pawtucket station, had his right arm caught between the drawheads, and several bones were broken.

August 8. John Prior, employee, Providence Division, while coupling cars near station, Providence, got caught between deadwoods, and two ribs on his right side were broken.

August 10. Peter Ashly, freight brakeman, Providence Division, was struck by overhead bridge near Pawtucket, but escaped with a long gash cut in the side of his head.

August 22. C. G. Gibson, of New York, while walking on the tracks between Charles street and Branch avenue bridges, was struck by passenger train No. 1500, Worcester Division, and lived but a few moments.

August 23. Frederic A. Carr, freight brakeman on Providence Division, was thrown from flat car by the breaking of the brake rod he was turning. He received severe injuries about the head and one knee was fractured.

August 24. John Hipson alias John McCarthy was found by the side of the tracks of the N. Y. & N. E. R. R., near River street bridge, Woonsocket, in an unconscious condition. He was taken to Woonsocket Hospital, where he died the next day, without regaining consciousness. It was supposed he was struck by some train.

August 25. John Maloney, of Hebronville, Mass., attempted to get on forward platform of train No. 1493, Worcester Division, as it was moving out of station at Pawtucket. He fell under the wheels and one truck passed over his right foot and ankle, crushing it so severely as to necessitate amputation, which was performed at the R. I. Hospital. Discharged Oct. 31, cured.

August 26. Martin Flaherty, of Scranton, Pa., freight brakeman on the Providence Division, while riding on side ladder of car, either fell or was knocked off by another car. He fell under the wheels, and both legs were cut nearly off. He was taken to the R. I. Hospital, but died the same night.

August 27. John Flynn, of Lewiston, Me., attempted to get on the front platform of train No. 36, N. Y. & N. E. R. R., at Pascoag, after train had started, but fell under the wheels, was run over and received injuries from which he died in a few moments.

Sept. 2. The body of Mary Hand was found on the tracks of the Stonington Division, near Hill's Grove. It was supposed she was struck and killed by train No. 81, while she was walking on the track.

Sept. 4. Martin Thompson, while lying in an intoxicated condition on the track of the N. Y. & N. E. R. R., in freight yard at Woonsocket, was run over by switching engine, and received injuries from which he died the next morning at the Woonsocket Hospital.

Sept. 4. Passenger train No. 1479, Worcester Division, struck and killed a man who was walking on the track near Blackstone junction engine-house. The body was not identified.

Sept. 6. Roscoe Cook, 15 years old, while running over train of freight cars attached to switching engine of N. Y. & N. E. R. R., fell between the cars, and five cars passed over him. He escaped with a few cuts and bruises.

Sept. 18. Martin O'Gara, a freight brakeman, Providence Division, was caught between brake wheels, and received injuries to ribs and stomach.

Sept. 18. Thomas Prior, who it was supposed was stealing a ride on train No. 218, Providence Division, jumped from the train near Boston switch, Central Falls, and was run over; one foot was cut nearly off. He was taken to the R. I. Hospital, where he still remains.

Sept. 19. E. D. Gaylord, of Worcester, Mass., passenger on train No. 94, Providence Division, jumped or fell from train near Smith street bridge, Providence, and was run over. Both legs were cut off below the knee. He was taken to the R. I. Hospital and died the next day.

Sept. 19. John Moffett, while driving a two-horse team across Brayton avenue crossing, Providence, was struck by train No. 104, Stonington Division, and died in a few minutes. The gates were open at the time. The flagman was eating his dinner, and James Keough, a track-walker, opened the gates.

Sept. 19. Frederick Tando, a laborer at work on a gravel train, Worcester Division, fell between two dump cars and had both legs severed below the knee.

Sept. 26. The train crew of train No. 1404, Worcester Division, found the mangled remains of a man's body strewn along the road-bed near Hamlet station. The body was afterwards identified as that of J. C. Osborne, of New York city. It is supposed that while walking on the track in an intoxicated condition, the previous evening, he was struck by freight train No. 1497.

October 1. The trainmen on train No. 102, N. Y. & N. E. R. R.,

found the body of John Coffee beside the track about one-half mile from Greystone station, with head and right arm cut off. He was struck by engine of train No. 87, while walking on track.

October 1. William E. Snyder, freight brakeman, Providence Division, while coupling cars in yard at Branch avenue bridge, fell beside the track, and was struck by one of the cars. His thigh was broken and body severely bruised. He was taken to the R. I. Hospital, where he still remains.

October 9. Freight train, No. 1494, Worcester Division, came in collision with some freight cars which had been kicked upon main track, near Branch avenue bridge. Conductor Walter Cooper was thrown from train and severely bruised.

October 10. Thomas Hanlon, of Johnston, while walking across Merino bridge, was struck by train No. 29, N. Y. & N. E. R. R., and instantly killed.

October 13. Charles Thayer, a freight brakeman on Providence Division, while coupling cars near Providence station, had his arm caught between dead-woods and severely injured.

October 19. Freight train No. 354, and passenger train No. 353, Providence, Warren & Bristol R. R., came in collision near Drownville station. The engineer and fireman of freight train both jumped and escaped injury. John T. Smith, fireman on 353, had his foot caught between engine and tender and crushed so severely that it was amputated at the R. I. Hospital; discharged December 8, cured. The engineer, Thomas Brightman, had his face cut by glass and splinters, one hand bruised, and back injured. None of the passengers were injured. The collision was caused by smoke from engine which obscured the signal.

October 25. William C. Robinson, a freight brakeman on Stonington Division, while coupling cars, near Wood River Junction, was caught and the bones in palm of his hand were broken.

October 26. John H. Porter, baggage-master at the Bristol

station, Providence Division, while coupling cars was caught between them. His collar bone and six ribs were broken.

Nov. 3. Thomas Waterman, 15 years old, while crossing tracks at East Greenwich station, was struck by train No. 20, Stonington Division, and instantly killed.

Nov. 5. Frederick Cheney, yard brakeman at Woonsocket, N. Y. & N. E. R. R., while riding on side of freight car was knocked off the car by cars on adjoining track. He was somewhat bruised and received internal injuries.

Nov. 5. Samuel G. Stiness, Superintendent of the Pawtucket Gas Co., attempted to cross the tracks near Pawtucket station when train No. 1474, Worcester Division, was coming into the station, but slipped on the wet planking, fell on the track in front of the engine, was run over and instantly killed. The gates were down at the time, and he passed under them.

Nov. 7. John B. Donahoe, a flagman, while coupling cars of Providence Division, near station at Providence, got caught and had hand severely jammed.

Nov. 18. Dennis Madden, yard brakeman, N. Y. & N. E. R. R., at Valley Falls, while coupling cars was caught by lumber that projected over end of car and had one hand jammed.

Nov. 18. A. T. Stewart, brakeman on Old Colony System, while coupling cars in yard at Providence, was caught between deadwoods, and had his fingers smashed.

Nov. 19. Katherine O'Leary, attempted to cross the tracks at station at Central Falls, when train No. 184, Old Colony System, was approaching. The gates were down, but she crawled under them though the flagman shouted to her that the train was coming. She dropped a bundle and stopped to pick it up, when she was struck by the train and instantly killed.

Nov. 23. Michael Boyce, a freight brakeman on the Worcester Division, while descending ladder of freight car in yard at Valley

Falls, was struck by electric signal pole and knocked from the car. He received severe injuries to head and back.

Nov. 26. John S. Gray, freight brakeman, Providence Division, was thrown from freight car near Providence station and severely injured by striking his head on the rails. The train broke apart and the cars came together again with sufficient force to throw him off.

Nov. 27. Theodore Byron, of Providence, while walking on the tracks near Branch avenue bridge, was struck by engine of freight train No. 218, Old Colony System. One leg was cut off and the other nearly severed. He was taken to the R. I. Hospital, and lived but a few minutes after he arrived there.

Nov. 30. John Alix, 11 years old, while walking on the tracks of the N. Y. & N. E. R. R., near Conant street bridge, was struck by engine of north-bound Worcester passenger train, at about 11:30 o'clock, and received injuries from which he died in a short time.

Dec. 1. Timothy Knowles, night switchman in the old freight yard of Worcester Division, Providence, was run over by the engine and caboose of train No. 1453, and instantly killed.

Dec. 15. Joseph Gregory, freight brakeman on N. Y. & N. E. R. R., was instantly killed near Smithfield station, Providence & Springfield R. R. The train parted, and when the two portions came together, he was thrown from car and crushed under it.

Dec. 17. John Wilcox, of train 218, Providence Division, attempted to release a hand brake, just as the air brake was applied by the engineman. His hand was caught in the brake wheel and his wrist broken.

Dec. 22. James Glancey, yard brakeman on the N. Y. & N. E. R. R., while coupling cars in Providence, had his right hand caught between draw-bars and first finger crushed. He was taken to the R. I. Hospital and amputation performed.

Dec. 24. J. E. Potter, of Providence, brakeman on N. Y. & N. E. R. R., while coupling cars near River Point had his arm caught and fractured.

Dec. 26. Daniel McCarthy, of Pawtucket, was found lying in the ditch on the east side of track near Central Falls station. He was unconscious; his right side and hip were badly bruised. He was probably struck by train No. 1465 while walking on the track.

Dec. 27. William Muirhead, of Pawtucket, attempted to drive across the grade crossing of the Moshassuck Valley R. R., near Lock bridge, when train was approaching from Saylesville at about 5:50 o'clock. His wagon was struck and nearly demolished; he was thrown out and escaped with a few slight bruises.

GRADE CROSSINGS.

The number of grade crossings is reported as 240, an apparent increase of 7, but there have been *no new grade crossings* established during the year. The number of crossings guarded by gates and flagmen is 71; by flagmen only, 92, leaving 77 unguarded. There are reported in addition to above, 218 farm or private crossings; 80 more than were reported last year. I cannot understand why there are such discrepancies in the annual returns from the several roads. But there is scarcely a road that can or does make these returns from year to year and have them the same, even when there has been no change in crossings during the year. They claim each time that the return is right, if it varies, the error must have been in the previous year. I have used every endeavor in my power to get these returns made correctly, but thus far without success.

During the year there were three persons killed and one injured at grade crossings; in three of these cases the gates were down; in the other, the gates were raised by a substitute flagman when an express train was approaching the crossing, and the man drove on

and was killed. It is worthy of notice that all the accidents were at crossings guarded by gates and flagmen.

In this connection I would refer to the petition of the directors of the Coweset Terminal & Transportation Co., for permission to cross the tracks of the Warwick Branch of the N. Y., N. H. & H. R. R., at grade near the drawbridge at Oakland Beach.

About the 1st of October I received the following petition and vote of the Company, accompanied by a petition signed by some of the largest manufacturing concerns in the State, and other prominent gentlemen:

At a meeting of the Directors of the Coweset Terminal & Transportation Co., held at the office of the Centreville Cotton Mill, at Centreville, R. I., this day, it was voted that the Treasurer be, and he is authorized in the name of the company to ask the Railroad Commissioner to permit the Coweset Terminal & Transportation Co. to cross the tracks of N. Y., N. H. & H. R. R., at Oakland Beach, at grade, it being impossible to arrange an overhead crossing.

J. B. ALLEN, *Clerk*,
M. FIFIELD, *Treasurer*.

CENTREVILLE, R. I., Sept. 21, 1894.

TO HON. EDWARD L. FREEMAN,

Railroad Commissioner:

Respectfully represents the Coweset Terminal & Transportation Company, a corporation created by the General Assembly of the State of Rhode Island, and duly organized:

That in building its road, from tide water at Oakland Beach, it will be necessary to cross the tracks of the New York & New Haven Railroad Co. at grade, no other way being possible.

Said petitioner therefore asks that it may be permitted to make such crossing.

COWESET TERMINAL & TRANSPORTATION CO.,

By M. FIFIELD, *Treasurer*.

September 24, 1894.

PROVIDENCE, R. I., July 23, 1894.

TO THE HON. EDWARD L. FREEMAN,

Railroad Commissioner:

DEAR SIR:—We, the undersigned, property owners and representing large and important business interests in the town of Warwick, and interested in the growth

and development of this section of the State, and further, believing that the plans as laid out by the Coweset Terminal & Transportation Co., if carried out, will aid very largely in the accomplishment of the results we so much desire, do respectfully ask you (as the matter of grade crossing, according to the charter of the Coweset Terminal Co., is *entirely* in your hands) to give the terminal question, and especially the unavoidable grade crossing at Oakland Beach, your early attention, as all matters pertaining to the lay out and surveys of said Coweset Terminal road, must be delayed until your decision is submitted.

We respectfully ask you to permit the Coweset Terminal Co. to cross the tracks of the N. Y. & N. H. road at grade, (under reasonable conditions) for the following reasons:

First. The topography of the country at Oakland Beach, is so flat and level that an overhead crossing is absolutely impossible; only an elevation of not more than eight feet, can possibly be obtained.

Second. All trains will be made up and practically *started* at the point of intersection with the N. Y. & N. H. road, as at an established station, and can always be under full and complete control.

Third. The impossibility of any other practical lay out, where sufficient water for large draught vessels and steamships can be discharged, and receive freight, coastwise or foreign.

Fourth. The consequent abandonment of the enterprise, if you report adversely. If allowed, and the plans materialize, it will be the means of directly hastening the larger development of the important industries and general business interests of the Pawtuxet Valley, and indirectly, the business of the west and northwestern portions of the State.

Hoping that the matter will receive your early and favorable consideration, we are

Respectfully yours,

S. H. GREENE & SONS.
H. W. POTTER.
D. RUSSELL BROWN.
P. S. PECKHAM & CO.
ESTATE OF ENOS LAPHAM, DECEASED,
(J. B. ALLEN, *Trustee.*)
CROMPTON CO.,
(By HOWARD RICHMOND, *Treasurer.*)

After due notice to parties, on October 13th I visited the location and gave it a careful examination, and on October 26 gave a public hearing in the State House, Providence. At the hearing

the granting of the petition was advocated by Gov. Brown, upon the ground that the proposed road would be of great benefit to the property in that vicinity, and that there would be but little if any possibility of danger, for the crossing as planned would be situated near the Oakland Beach station and also near the drawbridge, so that trains would be running at a slow rate of speed and under complete control.

The granting of the petition was also advocated by Hon. D. B. Potter, counsel for the Coweset road, C. S. Scarborough, Esq., and Hon. Henry L. Greene.

G. W. Hobbs, Esq., counsel for the N. Y., N. H. & H. R. R., and Chief Engineer, Edwin P. Dawley, spoke against the proposed grade crossing, and said that the question of the practicability of avoiding this crossing at grade could be solved, though at considerable additional expense.

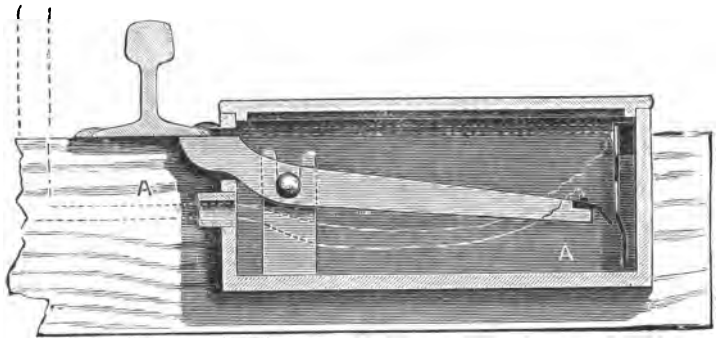
The situation is a peculiar one; the surrounding country is almost perfectly level; the distance from the proposed crossing of the Warwick Branch road to the proposed pier is only about 900 feet, and to get an overhead crossing, 18 feet in the clear, would require a very heavy grade on that side. Then, too, it is but about 120 feet from the drawbridge, over which the trains run very slowly.

It is also claimed by very responsible parties that if the petition is not granted it will be impossible to build the road, and the enterprise must fail to materialize. In view of these facts, and after careful consideration I have decided, that when the proposed road is laid out, surveyed and platted, (for up to the present time this has not been done,) and the exact location of the grade crossing defined, I would grant the petition, provided no other feasible way to cross could be devised and agreed to by both roads, under such restrictions, safeguards and regulations as I might deem necessary to prevent the danger of any collision.

The New York & New England R. R. have put in one of the O'Neil Crossing Alarms at a crossing on the Providence & Spring-

field R. R., near Enfield station, in the town of Smithfield. On Tuesday Dec. 4, 1894, I went out in response to an invitation to see its working. Three members of the Town Council of Smithfield were also present. It was operated very successfully, and the flagman at the crossing said that it had been in several weeks, and had worked satisfactorily.

The Alarm consists of a bell, battery, time register, battery house, and a track machine or circuit closer. For a double track two track machines are used, being located about 2000 feet each side of crossing. For a single track crossing three track machines are used, one at each side of the crossing and also one at the crossing to stop the bell after the train has passed the crossing.



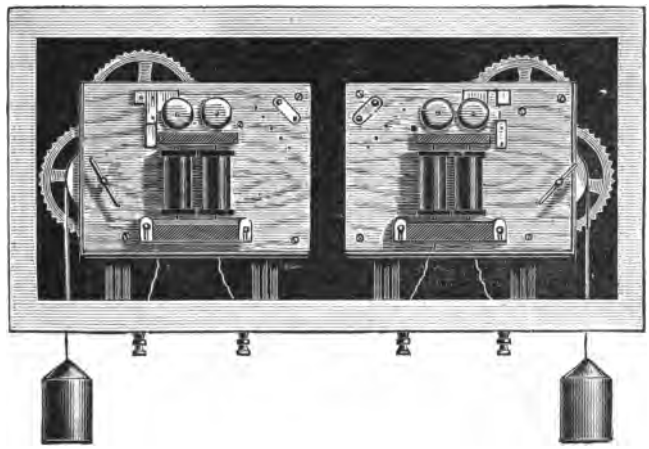
TRACK MACHINE.

The track machine consists of a fulcrumed lever inclosed in a cast iron box, 20 in. long, 6½ in. wide and 7 in. high, and is placed at any desired distance from the crossing, usually 2,000 to 3,000 feet. The lever or circuit closer is fulcrumed near the rail, so that a slight depression will raise the other end sufficiently to close the circuit in the register at the crossing, thus causing the alarm to ring until the train reaches the crossing, when it is cut out by the track machine located at the crossing.

The contact point in the box of the track machine will not corrode or oxidize, as the motion of the lever is such that it keeps the contact bright by the continued friction while the trains are

moving over it. There is no pounding or jarring with this track machine, as the lever rests under the rail and is not brought in contact with the wheels in any way. The box is placed between two ordinary sawed ties and bolted thereto, and projects only three-fourths of an inch above the ties, so that it is no obstruction.

There is no electric connection between wire and rail or ground. The circuit is strictly metallic, and is laid about two feet under ground from the circuit-closer to the telegraph pole, where it is strung the same as telegraph wires to the bell and battery at crossing.

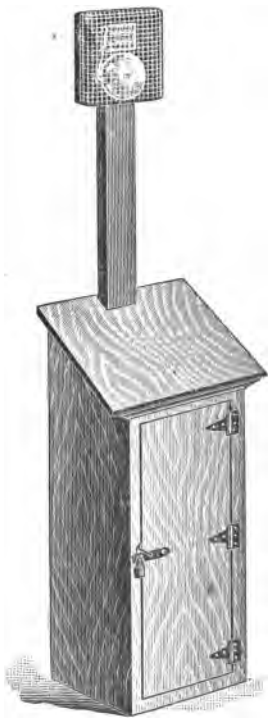


THE REGISTER.

The register is composed of four gear wheels, run by weights and controlled by a pair of electromagnets, so arranged that when the circuit is closed at the track machine it pulls the armature down, which releases the mechanism ; the register starts and closes the circuit through bell and battery, at the same time cutting out the line circuit.

By doing this the full force of the battery is thrown on the bell, which is close to the battery, thus avoiding all resistance of the line. The bell continues to sound the alarm until the engine reaches the crossing, where a track machine or cut out is placed

to open the line between the battery and bell, thus assuring a positive cut out of from one to five minutes, as desired.



The bell is a twelve inch vibrating gong with carbon points, and is placed on a 6x6 in. post 16 ft. high, and can be heard one-half mile in ordinary weather. It is enclosed in a wire screen frame, which does not interfere with the sound, but protects the bell.

The battery is composed of ten cells (Sampson), placed in a double frost proof box. These batteries from actual tests have lasted without any attention for seven months, with an average of 100 trains per day. All parts are well made, of the best material, and with proper care the cost of maintenance and renewal of battery will be merely nominal.

The battery and register are placed in a house with bell attached to a post as shown in cut.

This alarm does not depend on the length or speed of the train, as a single engine passing over at a low rate of speed will give the same alarm as a train of forty cars, and it does not require an expert mechanic to keep the mechanism in running order.

This Alarm is very highly recommended by the Commissioners of several States, and is in use on very many of the roads in the Middle and Western States. It is regarded as the best device yet invented for giving an alarm at country crossings as it is very reliable, gives its warning day or night, for all trains or engines, and can be heard a long distance from the crossing.

STATIONS.

The number of regular stopping-places is reported as 139; flag stations, 36. At 132 stations there are buildings, from a plain shed, open to the weather and infested by tramps, to comfortably furnished accommodations. There have been no improvements in station buildings the past year. Those that have keepers are generally quite clean and respectable; the old nuisances, so many times reported, still exist. I certainly expected that a new station house would have been built at Warren, where it is very much needed. The present building was erected some forty years ago; is small, inconvenient, and wholly unfitted for the wants of the patrons of the road. Plans were prepared for a new station two years ago, but they must have been mislaid. It is hoped that the new Superintendent, Mr. Spencer, will hunt them up and prevail upon the managers of the Consolidated R. R. to build the coming season.

IMPROVEMENTS.

On the Stonington Division, N. Y., N. H. & H. R. R., the following improvements have been made during the year.

Between Westerly and Noank four plate girder iron bridges have been raised up, and two miles of track ballasted.

At Stonington Junction, two long passing sidings have been put in.

At Westerly, track scales have been put in at the quarry sidings.

At Niantic, a modern iron derrick or crane for handling heavy freight has been erected.

At Wood River, passing sidings, fitted for north-bound freight, have been put in, to avoid danger and delays to passenger trains. These sidings will hold some fifty freight cars and engine, and are so arranged that the freight trains are not obliged to cross main track to get upon them. They are located near by the block signal tower, and under the full control of the operators. At

Kingston similar provisions have been made, also at Davisville, for north-bound trains.

At East Greenwich, extra freight siding has been put in to enlarge the facilities for handling freight.

At Apponaug, to meet the demands of increasing business, an additional signal tower has been put in, cutting the previous block in two nearly equal parts, thus greatly facilitating the moving of trains.

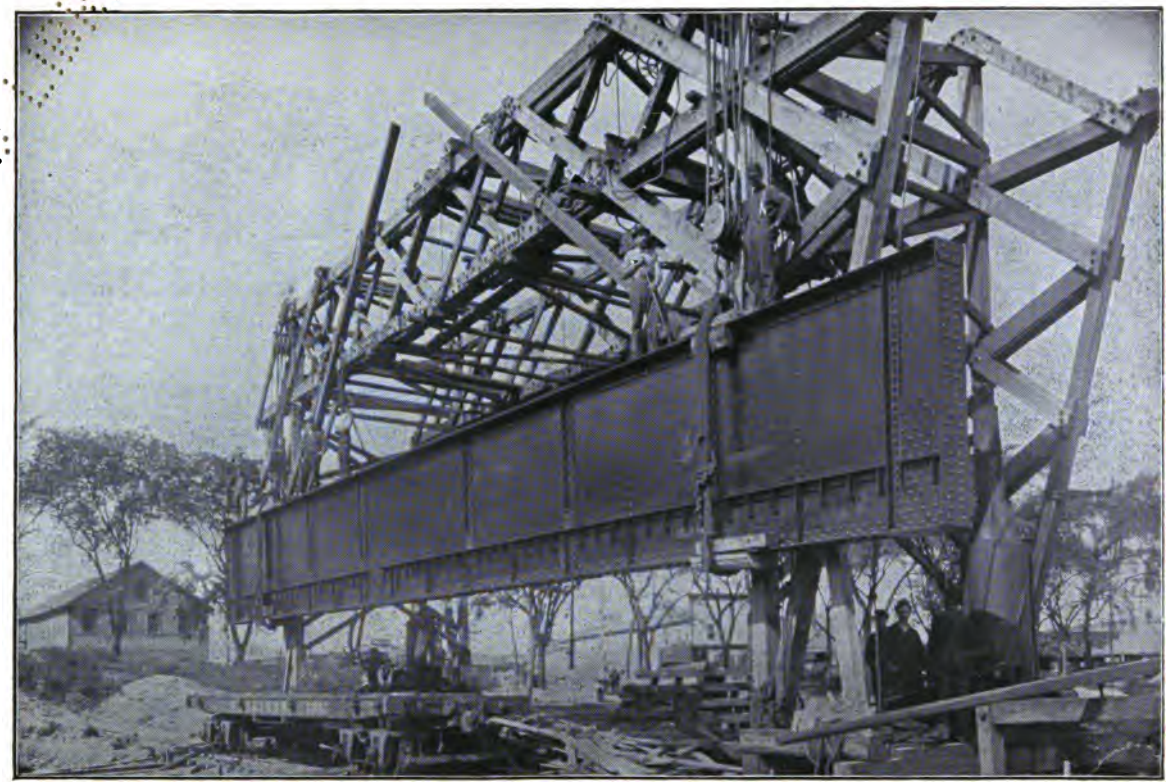
At Hills Grove, a long passing siding has been put in for north-bound trains.

At Harbor Junction, the freight business has been moved from Henderson street, to land owned by the company, on Butts street, and extending from Eddy street to the river. A new freight house has been built and the facilities for handling freight greatly increased.

At Providence, a change has been made in the freight stations. All inward freight is delivered at the old freight house of the Boston & Providence R. R. All outward freight is received at the old Providence & Worcester freight house.

The new freight yard, known as the West freight yard, has been completed in accordance with the plans made in connection with the Terminal changes. Formerly the tracks headed toward Gaspee street, and cars were then hauled south and then backed west to their destination in yard. This has all been changed; the tracks that ran east and west have been turned half around so as to run north and south. From the Smith street bridge the tracks have been laid diagonally across the former tracks, and extended to Promenade street.

The new yard contains ten acres and is arranged for nineteen tracks, from 400 to 1600 feet in length. Twelve of these tracks have been put in. The others will be as soon as the approaches to new station are completed. The yard fronts on Gaspee, Stillman and Promenade streets. Promenade street has been graded, curbed, paved, and as soon as the new bridge across the Moshassuck is



ERECTION, GASPEE STREET BRIDGE, END PLATE GIRDER.

ARCHIVE COPY

ERECTION, GASPEE STREET BRIDGE, MAIN BOX GIRDERS.

NAVAL POSTGRADUATE SCHOOL

completed, will be in close connection with the easterly end of Exchange Place.

On the East Branch R. R. the double track to Warren Avenue bridge has been completed.

The Providence, Warren & Bristol R. R. has been added to the Worcester Division, commencing Nov. 1st, and is under the charge of Supt. Spencer, thus making Providence more of a center for railroad operations.

PROGRESS ON TERMINAL FACILITIES.

The work of driving piles for the bridge foundations at Francis street were continued throughout the winter and spring of 1894. In March contracts were awarded for the construction of the masonry, piers, and abutments, which are to sustain the iron bridging. Contracts were also placed for steel bridging for Francis street, Gaspee street, Promenade street, and Woonasquatucket river. All the above contracts aggregating above $300,000.

The work of erecting the superstructure at Gaspee street was started in July, and the street is now in public use. The girders for the Francis street bridge are all erected in place. The material for Promenade street and Woonasquatucket river bridges is nearly all delivered and partially erected.

These bridge structures are some of the largest bridges of their type in the country, and appear to be complete modern structures, of ample strength, suitable design and efficient for their various purposes. The Woonasquatucket river bridge is the longest span, and is a pin connected deck structure. The other bridges are of the plate girder type.

The accompanying illustrations will convey a better idea than words possibly can of the great amount of work done in putting in foundations for, and the erection of, these immense bridges. The floors of these bridges are constructed on a novel plan which has been patented, and they will be absolutely water tight.

In addition to the above work, much filling around the masonry has been done. The new West freight yard, south of Smith street, and fronting on Promenade street, has been built in accordance with the terminal plans, and is now occupied.

It has been a year of activity on the bulky preparatory work, and the ensuing year should see equally substantial progress on the station building proper.

The architects have forwarded the work on the plans of the depot building, and those relating to the main structure have been presented to the City Council of Providence and have received the approval of the Council, attended with provisos relating to other parts of the work.

The land for the west approach to the station is not yet secured to the N. Y., N. H. & H. R. R. Co., and probably can not be for fifteen months yet, though it is arranged for as soon as the New England road moves to their new yard. Until this approach is absolutely secured to the N. Y., N. H. & H. R. R. Co., it can hardly be expected that all parts of the terminal work will be rushed to completion.

The city has shown commendable activity in building such streets as are needed on the cove, and are at work clearing the site for the new New England freight yard.

At the present station a shelter has been erected over the main tracks, crossing from platform to platform, and several other minor improvements in the building, have made the use of this old structure more convenient.

FOUNDATION PIERS, FRANCIS STREET BRIDGE.

FOUNDATION PIERS, FRANCIS STREET BRIDGE.

STREET RAILWAYS.

There are eight street railway corporations in the State, two more than at the time of last report. The new ones are the Pawcatuck Valley Street Railway Co., and the Pawtuxet Valley Electric Street Railway Co. The first named Company was organized May 25, 1893, but the road was not opened until July 15, 1894. It extends from the Westerly station on the New York, New Haven & Hartford R. R., to Watch Hill, one of the most noted summer resorts on the New England coast. The road is six miles long. During the summer the cars made half-hourly trips, and the road received a much larger patronage than its most sanguine friends had anticipated.

Watch Hill is at the southwest corner of the State; there are seven large hotels, and numerous private residences. The ocean view is not excelled anywhere on the coast, and beautiful drives add largely to its other attractions.

The Pawtuxet Valley Street Railway Co. was organized Oct. 6, 1891, but it did not commence operations until the 21st of July, 1894. It was built and has been operated by the Union Railroad Co. As its name implies it runs through the valley of the Pawtuxet, through the thriving villages of Jackson, Arkwright, Harris, Phenix, Clyde, Riverpoint, Arctic, Crompton, Quidnick, Anthony and Washington. It is seven and one quarter miles long, and the track is laid in the most substantial manner, the rails being of the T pattern, weighing 70 pounds and laid at standard gauge. Power for the operation of the cars is furnished from Electric Lighting

station at Riverpoint. The road has proved a success thus far, furnishing a quick, cheap and pleasant means of communication between these villages, which has been generally appreciated by the inhabitants.

The Interstate road has not been started since the destruction of its power-house by fire; negotiations have been in progress, and it is hoped will prove successful, by which this road will pass into the hands of some syndicate or corporation, and its operation will be resumed.

The trackage of all the roads is 138.985 miles, but of this, 122.185 is owned or operated by the Union R. R. Co. of Providence.

Since my last report, apparatus for heating by electricity has been placed in nearly all the cars and has proved quite satisfactory to the patrons; this improvement is a long step towards making street cars not only more comfortable, but much more healthful; as it is undoubtedly true that very many persons have been made seriously if not fatally ill by colds contracted in unwarmed cars.

Since my last report the use of horses as motive power has been practically discontinued. One short route of the Woonsocket road still uses horses, and they are also used to haul the cars of the Pawtucket Street Railway Co. across the tracks of the N. Y., N. H. & H. R. R., at the Broad Street Crossing.

EXTENSIONS.

The street railway systems in Providence and Pawtucket have undergone but few changes since my last annual report. A few extensions in the lines of the Union Railroad Company in Providence have been made, and new track laid in Pawtucket on Pidge avenue to connect with the rails belonging to the Pawtucket Street Railway Company in East avenue. The new lines opened in Providence have been the extension of Eddy street to Washington Park, and the Friendship line via North Main, Mill, Charles and Admiral streets to Eagle Park. The line from Providence to Paw-

tucket via Pidge and East avenues has not yet been put in operation.

The cars on the entire system of the Pawtucket Street Railway Company are now operated by electric power, and the change from the horse system to electricity appears to give the best of satisfaction to the people of Pawtucket.

The recent grants for extensions of the lines in Pawtucket, will, when built and put in operation, add greatly to street car transportation facilities in that thriving and growing city.

The electric power for the operation of the lines of the Union and Pawtucket Street Railway is generated at the power house built by the former company and located on Eddy street in the city of Providence. A description of this station was given in my last report.

GAUGE IN PAWTUCKET.

The plans of changing the gauge of the rails of the Pawtucket Company to the standard of 4 ft. 8½ inches, has been abandoned, it being deemed inadvisable to make the change owing to the narrowness of the main streets in the city of Pawtucket. When the company proposed to make this change from the existing narrow gauge in accordance with one of the conditions under which it was granted a franchise by the city, the merchants along Main street very generally signed a petition to the city council asking that the narrow gauge be retained, and in accordance with this request the city council voted to relieve the company from the condition in the franchise agreement which required the change to a standard gauge.

GRADE CROSSINGS.

In operating cars by electric power over grade crossings there has always been apprehension, and undoubtedly with good reason, that serious accidents would be liable to occur. One of the worst of these existing in this State is that at Broad Street in

Pawtucket, and to lessen to the least possible chance the danger at this point by reason of the electric cars crossing the steam road, the Pawtucket Street Railway Company has used horses for propelling its cars across the tracks of the New York, New Haven and Hartford Railroad Company. I am glad, however, to report that negotiations are pending between the city and the railroads in interest by which, within a few months this grade crossing will be done away with. This plan under consideration contemplates the making of a detour of the tracks of the street railway company from Broad street northerly through Exchange street and private land and crossing the steam road by a bridge at Humes street. Though this detour will lengthen both the Dexter and Broad street lines, the time heretofore taken up by delays in the waiting for passing steam trains will be more than compensated for, while—what is of more importance—the relief from all liability of a grade crossing accident will be secured.

FENDERS.

The importance of some suitable device in the form of fenders for street cars has been, if possible, more fully demonstrated the past year, by the great increase in the number of accidents, too many of them of a serious or fatal nature. I believe the officials of the several roads appreciate the demand and necessity for some suitable safeguard and are anxious to comply with it. They have given much time to the matter and have not spared expense in their search for a fender that would really be of some practical use. They have experimented with many kinds of fenders, and I have examined and witnessed the operation of several different makes; but until recently have not seen one which I thought was worthy of much consideration. The last one that I saw tested, was the invention of Mr. A. H. Jelly. I examined the model several months ago in connection with officials of the Union Railroad Co., and agreed with them that it seemed to be the best thus far presented. Since then the inventor has been at work in the repair

shops of the Company and has produced a fender which I saw tested upon a car a short time ago. It worked very satisfactorily, and so far as I could see, appears to be the most practical of any yet put in use. Some of the cars of the company are to be equipped with it, and if it works as well as it promises to, and proves to be efficient and practical, it will be adopted for all their cars.

CABLE TRAMWAY.

When the Union horse system was changed to an electric that portion of the Providence Cable Tramway line which had been operated by horse power was also transformed. Within the past year authority has been given the company to substitute electric power for the propulsion of cars upon the cable portion. The operation of cars upon the excessive grade on College Hill is to be assisted by a system of counterweights similar to those in successful use in the cities of Seattle and Portland. Without some such device it would be unsafe to make the ascent and descent of so heavy a grade, and this provision is being made by the company so as to preclude to the greatest extent any possible liability to accident.

CAPITAL STOCK, ETC.

The eight street railway corporations report 138,985 miles of track, with a paid-up capital of $3,239,500. They own 207 horses, 345 motor or grip cars, and 301 other cars. This is an increase in capital stock of $120,000; increase in miles of track, 41.284; increase in motor or grip cars, 243; decrease in other cars, 85, and in horses used, 1533.

INDEBTEDNESS.

Their funded debt is $360,000; an increase of $226,000; their floating debt is $2,281,931.90, an increase of $1,151,798.50. Their total indebtedness is $2,641,231.90; an increase of $1,377,798.50.

RECEIPTS AND EXPENDITURES.

Their total receipts were $1,470,324.43; expenditures, $1,285,-499.93; net earnings, $184,824.50. As compared with the returns of the previous year, these figures show an increase of $75,874.13, in receipts; an increase in expenditures of $102,248.44; a decrease in net earnings of $26,374.31. The only road that showed an increase in net earnings the previous year was the Providence Cable Tramway Co. In this case while the receipts were $9,569.40 less, the expenditures were $15,414.73 less, making the net earnings $5,845.33 more.

PROPERTY AND ASSETS.

The total property and assets of these corporations is reported as $6,482,772.82, an increase over the previous year of $1,576,923.76, or $601,340.92 in excess of their capital stock and all other indebtedness.

PASSENGERS CARRIED.

The total number of passengers carried was 29,540,425, an increase over the previous year of 1,759,603. Three of the roads reported a decrease in the number of passengers carried.

EMPLOYEES.

The number of persons employed by these corporations is 1165, a decrease of 208.

DIVIDENDS.

The only road that declared a dividend was the Newport Street Railway Co., which paid a dividend of 7 per cent. on preferred and 5 per cent. on the common stock.

ACCIDENTS.

There were twenty-three accidents reported to me as occurring in connection with the street railways, in which nine persons were killed and nineteen were injured. Of the persons killed, 2 were passengers who jumped from the cars while in motion, and 7 were killed while walking on or crossing the tracks. Of the injured 10 were passengers, 7 of whom were hurt by collision of cars, and 3 by jumping from cars while in motion ; 4 persons were injured in attempting to cross the tracks; 4 by collision of car with carriage in which they were riding, and 1 by coasting in front of cars.

It will be seen that the accident list has more than doubled during the year, and that there have been nine deaths in consequence instead of two in the previous year. The following is the list in detail:

Jan. 2. Gottleib Kolb, of Providence, a passenger on electric car 254 Union R. R. Co., jumped from the car while it was passing over Atwell's Avenue bridge; he struck head first on the pavement and received injuries from which he afterwards died.

February 6. Herbert Dyer of Providence, while coasting down Grand Avenue, was struck by cable car No. 30, Providence Cable Co., and somewhat injured.

April 7. Vega Marie Seidensticker, crossed the track on Cranston street in front of electric car No. 87, but a carriage coming along at the time, she jumped back to avoid it, and was struck by the car and instantly killed.

May 24. Swan Swanson, of Providence, attempted to cross the tracks in front of electric car No. 492, but slipped and fell. One wheel passed over his leg crushing it between ankle and knee. He was taken to the R. I. Hospital; discharged Sept. 8, cured.

May 30. Willie Heywood, 10 years old, attempted to cross the tracks near Cleveland street, Central Falls, but was struck by

electric car No. 158, and received injuries from which he died the same day.

June 8. Peter Donahoe was pushed by one of his companions and fell in front of Pawtucket car No. 338. His head and knee were cut.

August 7. Mary Holmes was struck by electric car No. 708, while attempting to pass between two cars, near Ingraham's corner, East Providence. She was picked up in an unconscious state and taken to the R. I. Hospital; upon regaining consciousness she appeared to be insane, and was taken to the State Insane Asylum where she died on the 24th inst.

August 18. Israel Riley of Crompton, was a passenger on motor car of the Pawtuxet Valley Electric Street Railway Co., and jumped from the car while it was in motion. He was struck by the trail car attached and one foot was run over. He was taken to the R. I. Hospital, where he died on the 24th of August.

August 19. Electric car No. 715 came in collision with car No. 712, near Warren Avenue, East Providence. Car No. 712 stopped for passengers to alight, and as it was on a down grade, car No. 715, which was following closely, could not be stopped but crashed into the rear platform of the forward car. Six persons, John Tucker, Thomas Sullivan, Mrs. D. B. Parker, Joseph Hoagland, L. E. Hersey and Frank McLaughlin were injured, but none of them seriously.

Sept. 10. Mary Morris was severely injured by Riverside electric car No. 715, striking the team in which she was riding with George Hodginson. The horse was killed.

Sept. 24. Bridget Cannon, 70 years old, attempted to cross the tracks on North Main street, Providence, but was struck by electric car No. 304, and received injuries to head from which she died at the R. I. Hospital without regaining consciousness.

October 11. Howard Arnold, 7 years old, residing in the village of Arctic, was struck by electric car No. 2, Pawtuxet Valley Railway Co., and instantly killed. He ran out of the school-yard, and while looking sideways ran directly in front of car.

October 17. Auburn electric car No. 44, struck a team of the Providence Coal Co., at the corner of Francis street, and the driver of the team, John Smith, was thrown from his seat and received cuts and bruises on the head.

October 21. Patrick Dowd attempted to cross South Main street, Providence, in front of Riverside electric car No. 611, but was struck by the car and instantly killed.

October 29. Edward Hamill, of Providence, stepped off from electric car No. 235, at the corner of Frost and North Main streets, Providence, and was struck by the side of another car going in the opposite direction. He was knocked down and severely bruised.

Nov. 16. Joseph Vient, of Providence, attempted to cross the track at the corner of Broad and Sylvian streets, Central Falls, in front of electric car No. 4, Pawtucket Street Railway Co., but was knocked down and instantly killed; he was deaf and dumb.

Nov. 17. S. E. Williams, passenger, fell from electric car No. 67, Union R. R. Co., at the corner of Public and Eddy streets, Providence, and received injuries about the head.

Nov. 17. J. McKnight, of Pontiac, was riding on step of electric car of Union R. R. Co., on Elmwood avenue, and when near Wilson street, was struck by a tree and knocked from the car. He was taken to the R. I. Hospital.

Nov. 29. E. Humes, of Pawtucket, while riding in tip cart, was struck by electric car No. 233; his cart tipped over, he was thrown out and one leg was fractured. The horse shied as the car approached, and backed in front of it.

Nov. 29. Car No. 38 was run into by electric car No. 501, Union R. R. Co., on Plainfield street, near Laurel Hill, and a passenger, Elbenco Ricco, was thrown from seat and had one rib broken.

Nov. 30. Samuel Amesbury, 77 years old, was struck by electric car No. 207, Union R. R. Co., opposite No. 417 North Main street, Providence, and knocked down but escaped without serious injury.

Dec. 1. O. B. Parker, of Central Falls, was riding from station at Pawtucket, in coupé, driven by George W. Grant, and when opposite Barton street, electric car No. 48 came in collision with the carriage. The carriage was smashed, and Mr. Parker received quite severe injuries.

Dec. 24. Richard Meagher, fell or was jarred from the platform of electric car No. 232, on Admiral street, Providence, and injured so severely that he was taken to the R. I. Hospital; discharged Jan. 4, 1895, cured.

RECOMMENDATIONS.

I would respectfully renew my recommendations concerning the necessity of suitable fenders and wheel guards for street cars, and trust that some law will be passed at this session, that shall require every street railroad to have such safeguards applied to all their cars, within a reasonable time.

I would also again call the attention of the General Assembly, to the large number of fatal accidents caused by walking on the tracks of the railroads, and request such legislation as will tend to discourage that practice.

In the appendix to this report will be found the annual returns from the railroad corporations, with lists of officers, several tables in which are summarized the business, with other details; also some of the correspondence of the office which is of public interest.

I have also published in full, a special report of the Railroad Commissioners of New Hampshire, made by order of the Legislature of that State, as to what legislation is needed in connection with the street roads. It is an able as well as interesting document, and though I do not agree with all its conclusions, yet it contains much information that cannot fail to be of value to all who are interested in the great problem of the best methods of legislating on this important subject.

EDWARD L. FREEMAN,

Commissioner of Railroads.

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APPENDIX,

CONTAINING THE

ANNUAL REPORTS AND LISTS OF OFFICERS

OF THE

Railroad Companies of the State,

FOR THE YEAR ENDING JUNE 30, 1894.

WITH

STATISTICAL TABLES.

RETURNS

OF THE

STEAM RAILROAD COMPANIES

FOR THE YEAR ENDING JUNE 30, 1894.

RETURN OF NEW YORK, PROVIDENCE & BOSTON RAILROAD COMPANY.

Incorporated, June, 1832. Opened, November, 1837.

The New York, Providence & Boston R. R. Company has been merged in the New York, New Haven & Hartford R. R. Co., and has ceased to exist as a separate organization.

RETURN OF NEW YORK, NEW HAVEN AND HARTFORD RAILROAD COMPANY.

Organized August 6th, 1872.

OFFICERS.

Charles P. Clark	President	New Haven, Conn.
John M. Hall	Vice President	"
C. S. Mellen	2d Vice President	"
J. R. Kendrick	3d Vice President	Boston, Mass.
William D. Bishop, Jr.	Secretary	Bridgeport, Conn.
William E. Barnett	Executive Secretary	New Haven, Conn.
William L. Squire	Treasurer	"
H. M. Kochersperger	Comptroller	"
F. S. Curtis	Chief Engineer N. H. System	"
Geo. S. Morrell	Chief Engineer O. C. System	Boston, Mass.
C. W. Platt	General Supt. N. H. System	New Haven, Conn.
E. G. Allen	General Supt. O. C System	Boston, Mass.
George L. Connor	Pass. Traffic Manager	New Haven, Conn.
C. T. Hempstead	General Pass. Agent N. H. System	"
A. C. Kendall	General Pass. Agt. O. C. System	Boston, Mass.
James N. States	General Ticket Agent	New Haven, Conn.
Geo. A. Morton	General Baggage Agent	"
N. A. Wilcox	General Freight Agt. N. H. System	"
C. Peter Clark	General Freight Agt O. C. System	Boston, Mass.
O. M. Shepard	Division Superintendent	New York City.
C. S. Davidson	" "	Hartford, Conn.
W. A. Waterbury	" "	New Haven, Conn.
A. S. Ostrander	" "	"
R. G. Curtis	" "	"
J. P. Hopson	" "	"
Geo. W. Beach	" "	Waterbury, Conn.

J. V. A. Trumbull	Division Superintendent	Hartford, Conn.
F. C. Payne	" "	Danbury, Conn.
Isaac N. Marshall	" "	Boston, Mass.
J. B. Gardiner	" "	Providence, R. I.
F. G. Spencer	" "	" "
C. A. McAlpine	" "	So. Framingham, Mass.
J. C. Sanborn	" "	Boston, Mass.
A. L. Ackley	" "	Taunton, Mass.
J. H. French	" "	Hyannis, Mass.
John Henney, Jr	Supt. Motive Power N. H. System	New Haven, Conn.
J. N. Lander	Supt. Motive Power O. C. System	Boston, Mass.
W. H. Fry	General Supt. Car Department	New Haven, Conn.
E. E. Pratt	Superintendent of Buildings	"
F. H. Crane	Superintendent D. R. and S. Cars	New York City.
Henry A. Bishop	Pur. Agent	New Haven, Conn.
R. W. Husted	"	Boston, Mass.

DIRECTORS.

E. H. Trowbridge	Died Nov. 24, 1893.
William D. Bishop	Bridgeport, Conn.
Nathaniel Wheeler	Died Jan. 1, 1894.
Henry C. Robinson	Hartford, Conn.
Charles P. Clark	New Haven, Conn.
Joseph Park	New York City.
Chauncey M. Depew	"
Henry S. Lee	Springfield, Mass.
William Rockfeller	New York City.
J. Pierpont Morgan	"
Leverett Brainard	Hartford, Conn.
George Macculloch Miller	New York City.
John M. Hall	New Haven, Conn.
Charles F. Choate	Boston, Mass.
Nathaniel Thayer	"
Royal C. Taft	Providence, R. I.
Charles F. Brooker	Torrington, Conn.
Carlos French	Seymour, Conn.
George J. Brush	New Haven, Conn.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$37,942,900 00
Capital Stock actually paid in (preferred)	None.
Subscriptions to Convertible Debenture Certificates	9,850,775 00
Funded Debt	4,300,000 00
Other debt (Deficient liabilities, Current liabilities, and Accrued liabilities)	5,614,255 77
Total Gross Debt	57,707,930 77
Construction account / Equipment account	45,105,948 07
All other assets	17,454,316 68
Total property and assets	62,561,264 70
Receipts passenger department	14,858,328 63
Receipts freight department	10,423,546 43
Receipts from all other sources	404,490 41
Total receipts	25,686,365 47
Operating expenses, excluding salaries and wages	6,225,382 55
Interest paid within the year	590,543 48
Taxes paid within the year	1,409,459 61
Salaries and wages	11,707,326 93
All other expenditures, viz., rentals of leased lines	3,379,974 95
Total expenditures	23,312,687 52
Net earnings	2,373,677 95
Rate and amount of dividend paid, 2½ per cent. each quarter on stock outstanding	3,631,292 50
Deficit after paying dividend	1,257,614 55
Surplus at beginning of year	6,109,916 16
Expended during year for new rolling stock and floating equipment	392,279 09
Expended during year for repairs of rolling stock, including repairs to tools, etc., in shops, and for floating equipment	2,144,902 34
Rolling stock account at beginning of year, including floating equipment and excluding cost of equipment of N. Y., P. & B. and H. & C. V. Railroads, which is included in construction account	5,111,514 86

Rolling stock account at end of year, including floating equipment and excluding cost of equipment of N. Y. P. & B. and H. &. C. V. Railroads, which is included in construction account	5,503,793 95
Expended for maintenance of way, and structures	7,175,568 61
How much of last account charged to construction account	4,052 834 39
How much of same charged to expense amount	3,122,729 22
Balance of construction account at beginning of year	35,549,319 78
Balance of construction account at end of year	39,602,154 12
Total number of passengers carried during year	44,448.324
Total number of tons merchandise carried during the year	8,717,879
Number of locomotives	669
Number of locomotives equipped with driver brakes	529
Number of passenger train cars	1,635
Number of passenger train cars equipped with power brakes	1,635
Number of passenger train cars equipped with improved quick acting brakes	1,090
Number of passenger train cars heated by direct steam	825
Number of passenger train cars heated by steam heaters	810
Number of passenger train cars heated by common stoves	None.
Number of freight cars	11,939
Number of freight cars equipped with power brakes	1,398
Number equipped with automatic couplers	3,051
Total length of road in miles, Owned	282.35
Total length of road in miles, Operated, includ'g trackage rights over 22.33 miles	1,469.28
Miles of road in this State, Owned	62.12
Miles of road in this State, Operated	130 11
Miles of track in this State reckoned as single track	299.28
Number of regular stopping places in this State	67
Number of flag stations	14
Number of stopping places provided with station buildings	74
Whole number of street or highway grade crossings in this State.	130
Number guarded by gates and flagmen (6 crossings have also electric bells)	55
Number guarded by flagmen only (1 crossing has also electric bells).	58
Number where only electric bells are used	1
Number of farm or private grade crossings	186
Number of bridges in this State	127
Number built of stone	17

Number built of iron	44
Number built of wood	66
Number combination	None.
Number of new bridges built during the year in Rhode Island	None.
Tons of new steel rails laid during the year in Rhode Island	2,361.72
Number of ties laid during the year in Rhode Island	92,058
Number of new stations built during the year in Rhode Island	None.
Number of passengers killed during the year in this State	None.
Number of passengers injured during the year in this State	None.
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons walking on the track killed	17
Number of persons walking on the track injured	7
Number of persons falling from trains injured (trespasser)	1
Number of persons getting on moving trains—killed	1
Number of persons getting on moving trains—injured	5
Number of employees killed	6
Number of employees injured	19
Average number of persons employed in this State (estimated)	1.600
Average rate of fare per mile, local tickets	$.0200
Average rate of fare per mile, commutation tickets	.0059

The following is a list of stations on Stonington Division in Rhode Island with distances from Providence. Flag stations designated by *.

Stations.	Miles.
Providence	0
Atwells avenue	1.19
Olneyville	1.83
Cranston street	2.76
Elmwood	3.49
Roger Williams Park*	4.40
Auburn	5.12
So. Auburn*	5.88
Norwood	6.62
Hills Grove	8.41
Greenwood*	9.72

Stations.	Miles.
Apponaug	10.60
Cowesett	11.81
Chepiwanoxet*	12.31
East Greenwich	13.40
Potowomut*	14.40
Davisville	16.88
Wickford Junction	19.40
Slocumville	22.98
Kingston	27.00
Kenyon	31.37
Shannock	32.01
Carolina	32.71
Wood River Junction	35.03
Niantic	39.05
Westerly	43.72

DESCRIPTION OF RAILROAD OPERATED BY NEW

ROAD

NAME OF ROAD.	FROM	TO
New York, New Haven & Hartford.....	Woodlawn Junction, N. Y	Springfield, Mass.....
	Stamford, Conn.....	New Canaan, Conn.....
	Shore Line Jc., New Haven.	Belle Dock, New Haven...
	Union Depot, New Haven.	N H.& D.R.R.,New Haven.
	Berlin, Conn.....	Middletown, Conn. .. ...
	Berlin, Conn..... ...	New Britain, Conn.....
	Hartford, Conn.....	Fenwick, Conn.....
	Freight Branch at Hartford.	
	Windsor Locks, Conn.....	Suffield, Conn.....
	New London, Conn.....	Providence, R. I.....
	Auburn, R. I.....	Buttonwoods, R. I... .....
	Auburn, R. I	Pontiac, R. I.....
	Auburn, R. I.	Henderson St., Providence.
	Groton, Conn.....	Poquonnock Junc., Conn..
	Stonington Loop at Ston'g'n	
TOTAL ROAD OWNED.....		

ROAD OPERATED

Harlem River & P C. (1)	Harlem River, N. Y. City.	New Rochelle, N. Y .....
Danbury & Norwalk. (2)	Danbury, Conn..... ...	Wilson Point, Conn.....
do	Branchville, Conn.....	Ridgefield, Conn.....
Housatonic .....(3)	Bridgeport, Conn....	Massachusetts State Line...
do	Botsford, Conn..	Huntington, Conn.....
do	Brookfield Junction, Conn.	Danbury, Conn.....
Berkshire.....(4)	Connecticut State Line...	West Stockbridge, Mass...
West Stockbridge....(5)	West Stockbridge, Mass...	New York State Line.....
Stockb'ge & Pittsfield (6)	Van Deusenville, Mass.....	Pittsfield, Mass.....
Naugatuck.....(7)	Naugatuck Junction, Conn	Winsted, Conn ... .
do	Waterbury, Conn	Watertown, Conn. .....
New Haven & Derby.(8)	New Haven, Conn.....	Ansonia, Conn.....
do ...	Derby, Conn....	Huntington, Conn.....
New Haven & Northampton..(9)	New Haven, Conn.....	Conway Junction, Mass...
do	Farmington, Conn.... ..	New Hartford, Conn.....
do	Northampton, Mass.....	Williamsburg, Mass.....
do	South Deerfield, Mass.....	Turner's Falls, Mass.....
Holyoke & Westfield...	Westfield, Mass.....	Holyoke, Mass.....
Shore Line.....(10)	New Haven, Conn.....	New London, Conn.....
B. & N. Y. Air Line (11)	New Haven, Conn.....	Willimantic, Conn... ....
Colchester.....	Turnerville, Conn.....	Colchester, Conn.....
Providence & Worcester	Providence, R I..... ...	Worcester, Mass*.....
do ..	Valley Falls, R. I.....	East Providence, R. I.....
Pawtuxet Valley.....	Pontiac, R. I.....	Hope, R. I.....
CARRIED FORWARD.....		

* Includes only one-half of mileage of tracks between Providence Passenger Station and "Boston miles each; all owned jointly by the P. & W. R. R. Co. and the B. & P. R. R. Co.

YORK, NEW HAVEN & HARTFORD R. R.

OWNED.

MILEAGE.					
First Track.	Second Track.	Third Track.	Fourth Track.	Sidings.	TOTAL.
122.44	122 44	24 38	24.38	108.82	402 46
7 66	... .	.....	.....	.85	8.51
1.00	1.00	.....	.....	5 06	7.06
1.66	.....	.....	.....	.....	1.66
9 70	.....	.....	.....	4.73	14.43
3.18	....	.....	....	3.66	6.84
46 20	.....	.....	.....	8.52	54.72
.84	.....	.....	.....	.....	.84
4.32	.....	.....	.....	1 02	5.34
62.11	61 66	.....	.....	23 39	147.16
9 90	.....	.....	.....	1.62	11.52
4.69	.....	.....	.....	.39	5 08
3.58	.....	.....	.....	1 50	5.08
4.10	.....	....	.....	.68	4.78
.97	.....	.....	.....	.....	.97
282 35	185 10	24.38	24.38	160 24	676.45

UNDER LEASES. (See foot notes)

11.50	11 50	.....	.....	26.16	49 16
26.28	.....	.....	.....	15 74	42.02
3.97	.....	.....	.....	.38	4 35
74 97	....	.....	.....	15.09	90 06
9.79	.....	.....	.....	.84	10 63
5 36	.....	....	.....	1.02	6 38
20.53	.....	.....	.....	4.42	24 95
2.64	.....	.....	.....	1 71	4.35
22 02	.. ..	.....	.....	5 39	27 41
56.55	5 40	.....	.....	18.70	80.65
4 44	.....	.....	.....	.66	5 10
12.90	.....	.....	.....	6 91	19.81
3 79	.....	.....	....	1 87	5 66
94 64	.....	....	.....	36.32	130 96
14.09	.....	.....	.....	3.12	17.21
7 51	.....	.....	.....	1.32	8.83
10 07	.....	.....	.....	2.35	12.42
10.32	.....	.....	.....	11 66	21 98
48.53	45.96	....	....	13 01	107.50
51.50	.....	.....	.....	13 16	64 66
3 59	.....	.....	.....	.90	4 49
40.90	39 88	1.90	1.90	43 44	128 02
7.00	.....	....	.....	7 65	14.65
5.67	....	.....	....	1.20	6.87
548.56	102.74	1.90	1 90	233.02	888 12

Switch." The total lengths are as follows:—1st and 2d tracks, 5 miles each; 3d and 4th tracks, 3.8

DESCRIPTION OF

ROAD OPERATED

NAME OF ROAD.	FROM	TO
		BROUGHT FORWARD. ..
Old Colony.....(12)	Boston, Mass..	Newport, R. I.....
	Mayflower Park, Mass....	Somerset Junction, Mass ..
	Middleborough, Mass.....	Provincetown, Mass.....
	Raynham, Mass.....	Whittenton Junction, Mass.
	Braintree, Mass..... ..	Kingston, Mass.....
	South Braintree, Mass.....	Plymouth, Mass.....
	Framingham, Mass.....	Lowell, Mass.....
	New Bedford, Mass.....	Fitchburg, Mass.....
	Neponset, Mass.	Mattapan, Mass.....
	Stoughton Br. Junc., Mass.	Stoughton, Mass.....
	Harrison Square, Mass.....	Shawmut & Milton Junc...
	Whitman, Mass.....	Bridgewater Iron Works...
	Elmwood, Mass.....	Westdale, Mass.....
	Atlantic, Mass.....	Braintree, Mass.....
	South Yarmouth, Mass....	Hyannis, Mass.....
	Buzzard's Bay, Mass	Wood's Holl, Mass .....
	Tremont, Mass.....	Fairhaven, Mass.....
	North Abington, Mass....	Hanover, Mass.....
	Matfield, Mass.....	Easton, Mass.....
	Exten. to Plymouth & Mid.	R. R ,Middleborough, Mass.
	Middleborough, Mass.....	Middlebor'h & Taunton Jc.
	Attleboro' Br. Junc., Mass.	Attleborough, Mass.....
	Attleboro' Br. Junc., Mass.	Whittenton, Mass ....
	Pratt's Junction, Mass	Sterling Junction, Mass....
	Lancaster Br. Junc., Mass..	Lancaster Mills, Mass .....
	Marlborough Junc., Mass..	Marlborough, Mass.....
	South Framingham, Mass..	Woman's Reformatory.....
	Walpole Junction, Mass...	No. Attleborough, Mass....
	Walpole Junction, Mass...	Norwood Junction, Mass ..
	Fall River, Mass.....	Warren, R. I.....
	Connection with P & W...	R. R. in Massachusetts ....
Nantasket Beach.... ..	Old Colony House, Mass...	Pemberton, Mass.....
Boston and Providence .	Boston, Mass.....	Providence, R. I.*.....
do ..	East Junction, R. I..... ..	India Point, Prov , R I ...
do ..	Forest Hills, Mass.....	Roxbury, Mass.....
do ..	Readville, Mass.....	Dedham, Mass..... ...
do ..	Canton Junction, Mass....	Stoughton, Mass.....
Attleborough Branch...	Attleborough, Mass.....	No. Attleborough, Mass....
Prov. Warren & Bristol	India Point, Prov , R. I. .	Bristol, Mass.....
do ..	India Point Branch.....	
Fall River.....	New Bedford, Mass.....	Fall River, Mass.....
Chatham.....	Harwich, Mass.....	Chatham, Mass.....
Plymouth & Middleboro'	Plymouth, Mass	Middleborough, Mass.....
	TOTAL ROAD OPERATED UNDER LEASES.....	
	TOTAL ROAD OWNED AND LEASED.....	

*Includes only one-half of mileage of tracks between Providence Passenger Station and "Boston miles each; all owned jointly by the P. & W. R. R. Co. and the B. & P. R. R. Co.

RAILROAD OPERATED.—(CONTINUED).

UNDER LEASES. (See foot notes).

MILEAGE.					
First Track.	Second Track.	Third Track.	Fourth Track.	Sidings.	TOTAL.
548 56	102 74	1.90	1.90	233.02	888.12
67 79	47.02	1.53	1.08	)	
36 31	21.44	.....	.....	)	
85.66	19 72	.....	.....	)	
3 38	3 38	.....	.....	} 166.66	692.75
32.34	8.41	.....	.....	)	
26 04	.....	.....	.....	)	
26 12	4.36	.....	.....	)	
91 25	49.40	.91	....	)	
3 30	.....	.....	.....	1 31	4.61
1.65	1.65	.....	.....	.58	3.88
2.39	....	.....	....	.43	2 82
6 12	.....	.....	.....	1.63	7 75
.75	.....	.....	.....	.....	.75
5.41	.....	.....	.....	3.31	8.72
5.05	.....	.....	.....	2.09	7 14
17.54	.....	.....	.....	2.16	19 70
15.17	.....	.....	....	1.20	16 37
7.80	.....	.....	.....	2.70	10 50
7.56	.....	.....	.....	.87	8 43
.42	....	.....	.....	.....	.42
8.04	.....	.....	.....	1.00	9 04
8 60	.....	.....	.....	1.72	10 32
98	.....	.....	.....	.....	98
5 03	.....	.....	.....	1.12	6.15
1 63	.....	.....	.....	.38	2.01
1 47	.....	.....	.....	1.31	2 78
.62	.....	.....	.....	.54	1.16
12 85	.....	.....	.....	} 5 32	23 93
5 76	.....	.....	.....	)	
7.95	.....	.....	.....	.67	8 62
.22	.....	.....	.....	.....	.22
6 95	.....	.....	.....	2.68	9 63
41 50	41 50	10.57	1.90	53.36	148.83
8.05	.....	.....	.....	9.14	17 19
5 37	5.37	.....	.....	3.00	13.74
2 22	2.22	.....	.....	2.21	6 65
4.05	4.05	.....	.....	2.90	11.00
4 00	.....	.....	....	1.48	5.48
13.60	7.77	.....	.....	} 7 07	29 19
75	.....	.....	.....	)	
12 25	.....	.....	.....	2.47	14.72
7 07	.....	.....	.....	.73	7 80
15.03	.....	....	.....	.87	15.90
1,164.60	319.03	14 91	4.83	513 93	2.017.30
1,446 95	504 13	89.29	29 21	674.17	2,693.75

Switch." The total lengths are as follows:—1st and 2d tracks, 5 miles each; 3d and 4th tracks, 3.80.

DESCRIPTION OF

ROAD OPERATED UNDER

NAME OF ROAD.	FROM	TO
New York & Harlem...	Woodlawn Junction, N Y.	Grand Central Depot, N. Y.
Fitchburg	Conway Junction, Mass....	Shelburne Falls, Mass.....
New York & N Engl'd.	Junction to Station.....	Willimantic, Conn.....
do	Dedham, Mass.....	Islington Junction, Mass...
do	Islington Junction, Mass ..	Norwood Junction, Mass..
Boston & Albany.....	Junction to Station	Worcester, Mass.....
Boston & Maine.....	Junction to Station.....	Lowell, Mass..... .....

TOTAL ROAD OWNED UNDER TRACKAGE RIGHTS.....

TOTAL ROAD OPERATED.....

RAILROAD OPERATED.—(CONTINUED).

TRACKAGE RIGHTS.

MILEAGE.					
First Track.	Second Track.	Third Track.	Fourth Track.	Sidings.	TOTAL.
12.03	12 03	12.03	12.03	.....	48.12
4.67	.....	.....	.....	.....	4.67
.36	.....	.....	.....	.....	.36
2.00	.....	.....	.....	.....	2.00
2.55	2.55	.....	.....	.....	5.10
.15	.15	.....	.....	.....	.30
.57	.....	.....	.....	.....	.57
22.33	14.73	12.03	12.03	.....	61.12
1.469 28	518.86	51.32	41 24	674.17	2,754.87

THE NEW YORK, NEW HAVEN & HARTFORD RAILROAD COMPANY OWNS THE FOLLOWING STOCK OF ROADS OPERATED UNDER LEASES.

(1) Harlem River & P. C. R. R.	$42,250.00	of	Capital Stock	amounting to	$42,250.00
(2) Danbury & Norwalk R. R.	446,525.00	of	Capital Stock	"	600,000.00
(3) Housatonic R. R.	300.00	of	Common Stock	"	23,300.00
do	2,645,000.00	of	Preferred Stock	"	2,875,600.00
(4) Berkshire R. R.	1,000.00	of	Capital Stock	"	600,000.00
(5) West Stockbridge, R. R.	39,600 00	of	"	"	39,600.00
(6) Stockbridge & Pittsfield R. R.	11,000.00	of	"	"	448,700.00
(7) Naugatuck R. R.	957,800.00	of	"	"	2,000,000.00
(8) New Haven & Derby R. R.	350,900.00	of	"	"	447,000.00
(9) New Haven & Northampton Co	2,404,600.00	of	"	"	2,460,000.00
(10) Shore Line Railway	808,000.00	of	"	"	1,000,000.00
(11) Boston & N. Y. Air Line R. R.	665,000.00	of	Common Stock	"	851,000.00
do	1,573,500.00	of	Preferred Stock	"	2,998,500.00
(12) Old Colony R. R.	5,522,000.00	of	Capital Stock	"	14,178,900.00

RETURN OF PROVIDENCE AND WORCESTER RAILROAD COMPANY.

Incorporated, 1844. Leased to and operated by New York, Providence, & Boston Railroad for 99 years.

OFFICERS.

Moses B. I. Goddard	President	Providence, R. I.
William A. Leete	Treas. and Clerk	"

DIRECTORS.

Moses B. I. Goddard	Providence, R. I.
Joseph E. Davis	Boston, Mass.
Jonas G. Clark	Worcester, Mass.
John W. Danielson	Providence, R. I.
G. Marston Whitin	Whitinsville, Mass.
A. George Bullock	Worcester, Mass.
John Nicholas Brown	Providence, R. I.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$3,500,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	1,500,000 00
Floating debt	None.
Total Gross debt	5,000,000 00
Construction account	4,276,250 00
Equipment account	828,887 40
All other assets	103,961 28
Total property and assets	5,209,098 68
Receipts passenger department	Road leased.
Receipts freight departments	

Total Receipts	446,398 06
Operating expenses	
Interest paid within the year	90,000 00
Taxes paid within the year	
Salaries and maintenance of organization	5,608 41
All other expenditures	
Total expenditures	95,608 41
Net earnings	350,789 65
Rate and amount of dividend paid (10 per cent.)	350,000 00
Surplus, after paying dividend for the year	789 65
Surplus at beginning of year	208,309 08
Expended during year for new rolling stock	
Expended during year for repairs of rolling stock	
Rolling stock account at beginning of year	828,887 40
Rolling stock account at end of year	828,887 40
Expended for maintenance of way	
How much of last account charged to construction account	
How much of same charged to expense amount	
Balance of construction account at beginning of year	4,276,250 00
Balance of construction account at end of year	4,276,250 00

The following are the stations in Rhode Island, Worcester Division, N. Y. N. H. & Hartford, with distances from Providence:

Stations.	Miles.
Providence	0
Charles street	1
Woodlawn	4
Pawtucket	4.50
Central Falls	5 50
Valley Falls	6
Lonsdale	7
Berkeley	9
Ashton	10
Albion	11
Manville	13
Hamlet	15.50
Woonsocket	16
Blackstone	16.50

RETURN OF PAWTUXET VALLEY RAILROAD COMPANY.

Incorporated July 11, 1872. Leased to and operated by New York, New Haven and Hartford Railroad Co., for 99 years at a net rental of 7 per cent. on the capital stock.

OFFICERS.

Henry Howard	President	Providence, R. I.
William H. Pope	Treasurer and Clerk	"

DIRECTORS.

Henry Howard	Providence, R. I.
Jonathan Chace	"
James H. Chace	"
R. G. Howland	Hope, R. I.
Edward F. Child	Providence, R. I.
William H. Pope	"
F. H. Peckham, Jr	"

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$100,900 00
Capital Stock actually paid in (preferred)	None.
Funded Debt	160,000 00
Floating debt	None.
Total Gross Debt	160,000 00
Construction account	
Equipment account	
All other assets	1,251 63
Total property and assets	262,151 63
Receipts passenger department	
Receipts freight department	
Receipts from all other sources	

Total receipts, rental of road	7,063 00
Operating expenses	
Interest paid within the year by N. Y., N. H. & H. R. R. Co.	10,600 00
Taxes paid within the year	
Salaries and wages	
All other expenditures	
Total expenditures	248 37
Net earnings	7,063 00
Rate and amount of dividend paid	7 per cent.
Surplus after paying dividend	1,251 63
Surplus at beginning of year	1,500 00

The Pawtuxet Valley R. R. extends from the village of Hope to Auburn, where it connects with Stonington Division. The following is a list of the stations with distances from Providence:

Stations.	Miles.
Providence	0
Auburn	5
South Auburn	6
Pocasset	7
Sockanosset	7½
Howard	8
Pontiac	10
Natick	11
Westcott	12
River Point	13
Clyde	13½
Phenix	14
Harris	14½
Arkwright	15
Jackson,	15½
Hope	16

RETURN OF OLD COLONY RAILROAD COMPANY.

Incorporated April 24, 1844. The Old Colony Railroad, with its leased lines, was leased to the N. Y., N. H., & H. R. R. Co., March 1, 1893, for 96 years, and all business not found in accompanying return is included in returns of N. Y., N. H. & H. R. R. Co.

OFFICERS.

Charles F. Choate	President	Boston, Mass.
Benjamin B. Torrey	Treasurer	"
Edward G. Parker	Clerk	"

DIRECTORS.

Charles F. Choate	Boston, Mass.
Thomas J. Borden	Fall River, Mass.
John S. Brayton	"
Charles P. Clark	New Haven, Conn.
Thomas Dunn	Newport, R. I.
George P. Gardner	Boston, Mass.
James R. Kendrick	"
Charles L. Lovering	Taunton, Mass.
John J. Russell	Plymouth, Mass.
Joshua M. Sears	Boston, Mass.
Nathaniel Thayer	Lancaster, Mass.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$14,178,900 00
Stock (liability account)	8,525 00
Funded debt	13,178,200 00
Floating debt	1,094,393 56
Total gross debt	28,460,018 56

Construction account	23,837,559 83
Equipment account	3,161,518 83
All other assets	2,307,732 55
Total property and assets	29,306,811 21
Receipts from all sources. Income from rental	1,703,532 66
Total receipts	1,703,532 66
Interest paid within the year	705,835 59
Salaries and organization expenses	10,434 57
Total expenditures	716,270 16
Net earnings	987,262 50
Rate and amount of dividend paid (7 per cent.)	987,262 50
Surplus after paying dividend	846,792 65
Surplus at beginning of year	1,241,236 65
Rolling stock account at beginning of year	2,340,773 95
Rolling stock account at end of year	3,161,518 83
Balance of construction account at beginning of year	23,215,691 36
Balance of construction account at end of year	23,837,559 83
Total length of road in miles	495.20
Miles of road in this State	18.32
Miles of track in this State reckoned as single track	24.07
Number of regular stopping places in this State	8
Whole number of street or highway grade crossings in this State.	7
Number of bridges in this State	23
Number built of stone	4
Number built of iron	3
Number built of wood	16

The Providence Division Old Colony Railroad extends from Providence to Boston. The following is a list of stations in Rhode Island, with distances from Providence.

Stations.	Miles.
Providence	0
Pawtucket	4½
Central Falls	5½
Pleasant View	6

The Plymouth and Taunton Division Old Colony Railroad extends from Boston to Newport, R. I. At Fall River it connects with Fall River, Providence & War-

ren R. R. The following is a list of stations in Rhode Island, with distances from Fall River.

Stations.	Miles.
Fall River	0
Tiverton	6
Bristol Ferry	8
Portsmouth	10
Portsmouth Grove	12
Newport	19

RETURN OF BOSTON & PROVIDENCE RAILROAD CORPORATION.

Incorporated July 11, 1831. Operated by Old Colony Railroad Company under a lease for 99 years.

OFFICERS.

Royal C. Taft	President	Providence, R. I.
Benjamin B. Torrey	Treas. and Clerk	Boston, Mass.

DIRECTORS.

Royal C. Taft	Providence, R. I.
Robert H. Stevenson	Boston, Mass.
Edward W. Hooper	Cambridge, Mass.
Roger Wolcott	Boston, Mass.
John Lowell	"
Charles P. Bowditch	"
Robert I. Gammell	Providence, R. I.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$4,000,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	2,170,000 00
Floating debt	None.
Total Gross debt	6,170,000 00
Construction account	5,046,088 30
Equipment account	871,234 35
All other assets	331,357 65
Total property and assets	6,248,680 30
Receipts from rental of property	489,800 00
Receipts from dividends on stock owned	400 00
Total receipts	490,200 00
Organization expenses	2,843 95

Interest paid within the year, and cash on hand to pay the same..	86,800 00
Total expenditures.....	89,643 95
Net earnings.....	400,556 05
Rate and amount of dividend paid, (10 per cent.).....	400,000 00
Surplus after paying dividend.....	78,680 30
Surplus at beginning of year.....	75,599 25
Rolling stock account at beginning of year.....	871,234 35
Rolling stock account at end of year.....	871,234 35
Balance of construction account at beginning of year.....	5,046,088 30
Balance of construction account at end of year.....	5,046,088 30

RETURN OF PROVIDENCE, WARREN & BRISTOL RAILROAD COMPANY.

Incorporated October, 1850. Leased to Old Colony Railroad Company from July 1, 1891, for 96 years.

OFFICERS.

Charles F. Choate	President	Boston, Mass.
Benjamin B. Torrey	Treasurer	"
George L. Greene	Secretary	Providence, R. I.

DIRECTORS.

Charles F. Choate	Boston, Mass.
Charles P. Clark	New Haven, Conn.
William Goddard	Providence, R. I.
James C. Church	Bristol, R. I.
Royal C. Taft	Providence, R. I.
James R. Kendrick	Boston, Mass.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$287,300 00
Capital Stock actually paid in (preferred)	150,090 00
Funded debt	None.
Floating debt	38,722 26
Total gross debt	476,022 26
Construction account	458,610 56
Equipment account	40,000 00
All other assets	2,539 58
Total property and assets	501,150 14
Receipts from all sources. Income from rental	23,603 56

Total receipts	23,603 56
Interest paid within the year	1,621 97
Salaries and wages	41 67
Total expenditures	1,663 64
Net earnings	21,939 92
Rate and amount of dividend paid (5 per cent. on preferred, 5 per cent. on common stock)	21,871 00
Surplus after paying dividend	25,127 88
Surplus at beginning of year	25,058 96
Rolling stock account at beginning of year	40 000 00
Rolling stock account at end of year	40,000 00
Balance of construction account at beginning of year	458,610 56
Balance of construction account at end of year	458,610 56
Total length of road in miles	14 35
Miles of road in this State	14 35
Miles of track in this State reckoned as single track	29.19
Number of regular stopping places in this State	14
Whole number of street or highway grade crossings in this State.	21
Number of bridges in this State	6
Number built of iron	6

The Providence, Warren & Bristol Railroad is in the Worcester Division of the Old Colony System, and extends from Providence to Bristol; at Warren it connects with the Fall River, Warren and Providence Railroad, for Fall River, Mass., and thence to Newport, R. I. The following is a list of the stations in Rhode Island with distances from Providence. Flag stations designated by *.

Stations.	Miles.
Providence	0.
India Point	0.
East Providence*	1.
Kettle Point	2 90
Silver Spring*	3.31
Riverside	4.46
Bullock's Point	5.16
Drownville	6.37
Nayatt	7.26
Barrington	8.66

Stations.	Miles.
Hampden Meadows*	9 16
Warren	10.34
Bristol	14.44
Cole's	13.21
South Swansea	14 61
Brayton Point*	15.59
Brayton*	17.29
Fall River	18 24

FALL RIVER, WARREN & PROVIDENCE RAILROAD COMPANY.

All the road and property of the Fall River, Warren & Providence Railroad Company was sold to the Old Colony Railroad Company, under foreclosure, in May, 1892, and became a part of the Old Colony System.

RETURN OF NEW YORK & NEW ENGLAND RAILROAD COMPANY.

Incorporated April 17, 1873.

OFFICERS.

———	———	.....President.*.....	——— ———
J. T. Odell	Vice Pres. and Gen. Manager	180 Summer St.,	Boston, Mass.
Jas W. Perkins	Secretary	"	"
Geo. B. Phippen	Treasurer	"	"
W. H. Dudley	Auditor	"	"
F. E. Dewey	Supt. of Transportation.	"	"
T. H. Fennell	Division Superintendent	East Hartford,	Conn.
T. W. Kennan	"	Providence,	R. I.

DIRECTORS.

Gordon Abbott	Boston, Mass.
Chas. F. Adams, 2d	"
A. S. Bigelow	"
Francis C. Lowell	"
A. C. Tower	"
S. M. Weld	"
John Kean, Jr.	New York, N. Y.

* Office vacant.

John G. Moore	New York, N. Y.
T. C. Platt	"
Samuel Thomas	"
Benj. F. Tracy	"
John W. Doane	Chicago, Ill.
Spencer Ervin	Philadelphia, Pa.
Joseph F. Sinnott	"
Arthur Brock	"
Marsden J. Perry	Providence, R. I.
B. F. Vaughan	"
D. S. Plume	Waterbury, Conn.
Arthur Sewall	Bath, Me.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$19,831,000 00
Berdell bonds, convertible into common stock	169,000 00
Capital Stock actually paid in (preferred)	3,817,600 00
Total capital stock	23,817,600 00
Funded debt	17,259,061 04
Supplies transferred from Norwich & Worcester Railroad	61,422 99
Floating debt, including interest accrued payable July 1, 1894	1,178,872 06
Accrued interest on funded debt, not yet payable	140,135 65
Accrued rentals not yet payable	17,284 00
Total gross debt	42,474,375 74
Construction account	35,038,349 42
Equipment account	5,311,566 20
Dividend No. 13, on preferred stock, payable May 1, 1892, payment enjoined	128,275 00
All other assets	258,639 07
Total property and assets	40,736,829 69
Receipts passenger department	1,884,132 35
Receipts freight department	3,125,554 27
Boston Harbor Transfer	2,880 79
Receipts from all other sources	384,208 94
Total receipts	5,396,776 35
Operating expenses	4,085,153 73
Interest paid within the year	1,096,857 90

Taxes paid within the year	262,476 90
Salaries and wages (included in operating expenses)	
Insurance	29,857 65
All other expenditures (rentals)	494,054 37
Total expenditures	5,968,400 55
Net earnings (deficit)	571,624 20
Rate and amount of dividend paid	None.
Surplus after paying dividend	None.
Surplus at beginning of year (deficit)	844,287 51
Expended during year for new rolling stock (credit)	295 21
Expended during year for repairs of rolling stock (included in operating expenses)	
Rolling stock account at beginning of year	5,311,861 41
Rolling stock account at end of year	5, 311,566 20
Expended for maintenance of way	610,860 28
How much of last account charged to construction account	None.
How much of same charged to expense amount	All.
Balance of construction account at beginning of year	35,025,410 78
Balance of construction account at end of year	35,038,349 42
Total number of passengers carried during the year	8,146,122
Total number of tons of merchandise carried during the year	2,991,342
Number of locomotives	212
Number of locomotives equipped with driver brakes	199
Number of passenger train cars	286
Number of passenger train cars equipped with power brakes	286
Number of passenger train cars equipped with improved quick acting brakes	286
Number of passenger train cars heated by direct steam (steam from engines)	50
Number of passenger train cars heated by steam heaters (steam from engines)	186
Number of passenger train cars heated by common stoves	None.
Number of freight cars	6,237
Number of freight cars equipped with power brakes	164
Number equipped with automatic couplers	1,273
Total length of road in miles	534 16
Miles of road in this State	70.74
Miles of track in this State reckoned as single track	93.06
Number of regular stopping places in this State	34

Number of flag stations	16
Number of stopping places provided with station buildings	43
Whole number of street or highway grade crossings in this State	87
Number guarded by gates and flagmen	12
Number guarded by flagmen only	19
Number where electric bells are used	2
Number of farm or private grade crossings	None.
Number of bridges in this State	51
Number built of stone	None.
Number built of iron	9
Number built of wood	42
Number combination	None.
Number of new bridges built during the year in Rhode Island	None.
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	26,858
Number of new stations built during the year	1
Number of passengers killed during the year in this State	1
Number of passengers injured during the year in this State	11
Number of persons killed at highway grade crossings	2
Number of persons injured at grade crossings	None.
Number of persons walking on the track killed	4
Number of persons walking on the track injured	3
Number of employees killed	None.
Number of employees injured	25
Average number of persons employed in this State	384
Average rate of fare per mile, local tickets	1 954-1000 cts.
Average rate of fare per mile, commutation tickets	1 379-1000 cts.

The following is a list of stations on the Central Division N. Y. & N. E. R. R. with distances from Providence. Flag stations designated by *.

Stations.	Miles.
Providence	0
Brayton Street	1.
Olneyville Junction	1.9
Arlington	2.9
West Arlington*	3.6
Cranston	4.0

Stations.	Miles.
Knightsville	4.9
Wayland Park*	5.7
Oaklawn	7.2
Pontiac	8.4
Natick	9.0
River Point	11.0
Arctic	11.6
Centerville	12.1
Quidnick	13.0
Anthony	13.4
Washington	14.4
Nipmuc	17.3
Coventry	18.2
Summit	21.7
Greene	24.2

RETURN OF RHODE ISLAND & MASSACHUSETTS RAILROAD COMPANY.

Incorporated June 27, 1871. Leased to and operated by N. Y. & N. E. Railroad Company for 99 years from October 1, 1887.
No rolling stock.

OFFICERS.

Jonathan Chace	President	Valley Falls, R. I.
A. B. Chace	Sec. and Treasurer	"

DIRECTORS.

Jonathan Chace	Valley Falls, R. I.
George L. Littlefield	Pawtucket, R. I.
Hezekiah Conant	"
A. B. Chace	Valley Falls, R. I
James P. Ray	Franklin, Mass.
Joseph G. Ray	"
Charles P. Clark	New Haven, Conn.
Edgar K. Ray	Franklin, Mass.
William S Roelker	Providence, R. I.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$180,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	None.
Floating debt	5,300 00
Total gross debt	5,300 00
Construction account	145,019 89
Equipment account	
All other assets	51,638 26
Total property and assets	196,658 15
Receipts passenger department	

Receipts freight department	
Receipts from all sources	16,028 99
Total receipts	16,028 99
Operating expenses	
Interest paid within the year	
Taxes paid within the year	
Salaries and wages	100 00
All other expenditures	304 22
Total expenditures	404 22
Net earnings	15,624 77
Rate and amount of dividend paid (2½ per cent.)	4,500 00
Surplus, after paying dividend	11,124 77
Surplus at beginning of year	233 38
Total length of road in miles	13.59
Miles of road in this State	7.39
Miles of track in this State reckoned as single track	7.64
Number of regular stopping places in this State	1
Number of flag stations	4
Number of stopping places provided with station buildings	4
Whole number of street or highway grade crossings in this State.	8
Number guarded by gates and flagmen	None.
Number guarded by flagmen only	2
Number where electric bells are used	None.
Number of farm or private grade crossings	
Number of bridges in this State	2
Number built of stone	None.
Number built of iron	None.
Number built of wood	2
Number combination	None.
Number of new bridges built during the year	None.
Cost of new bridges built during the year	None.
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	2,587
Number of new stations built during the year	None.

The Rhode Island & Massachusetts R. R extends from Valley Falls, R. I., to Franklin, Mass The following is a list of stations in Rhode Island with distances from Valley Falls. Flag stations designated by*

Stations.	Miles.
Valley Falls	0
Cumberland Mills	3.8
Abbott's Run	4.6
Arnold's Mills	5.9
Diamond Hill	8.1

RETURN OF THE PROVIDENCE & SPRINGFIELD RAILROAD COMPANY.

Organized Sept. 1, 1871. Leased to and operated by New York & New England Railroad Company for 99 years from October 1, 1890. All business not found in accompanying return is included in returns of N. Y. & N. E. R. R Co.

OFFICERS.

B. F. Vaughan	President	Providence, R I.
William H. Pope	Treasurer and Clerk	"

DIRECTORS.

Fenner H. Peckham, Jr.	Providence, R. I.
William H. Pope	"
William Tinkham	"
B. F. Vaughan	"
Charles L. Vaughan	"
D. A. Peirce	"
H. A. Cary	"
A. L. Sayles	Pascoag, R. I.
F. H. Prince	Boston, Mass.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$517,450 00
Capital Stock actually paid in (preferred)	None.
Funded debt	750,000 00
Floating debt	None.
Total gross debt	1,267,450 00
Construction account	1,267,450 00

Equipment account	
All other assets	None.
Total property and assets	1,267,450 00
Receipts from all sources. Income from rental	68,547 00
Total receipts	68,547 00
Operating expenses	None.
Interest paid within the year	37,500 00
Total expenditures	37,500 00
Net income	31,047 00
Rate and amount of dividend paid (6 per cent. per annum on $517,450.00)	31,047 00
Surplus after paying dividend	None.
Surplus at beginning of year	None.
Balance of construction account at beginning of year	1,267,450 00
Balance of construction account at end of year	1,267,450 00
Total length of road in miles	27.73
Miles of road in this State	26.10
Miles of track in this State reckoned as single track	32.78
Number of regular stopping places in this State	11
Number of flag stations	7
Number of stopping places provided with station buildings	16
Whole number of street or highway grade crossings in this State	38
Number guarded by gates and flagmen	2
Number guarded by flagmen only	6
Number where electric bells are used	1
Number of farm or private grade crossings	
Number of bridges in this State	19
Number built of stone	None.
Number built of iron	4
Number built of wood	15
Number combination	None.
Number of new bridges built during the year	None.
Cost of new bridges built during the year	None.
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	8,263
Number of new stations built during the year	None.

The Providence & Springfield Railroad extends from Providence, R. I., to Douglas Junction, Mass. The following is a list of stations with distances from Providence. Flag stations designated by a *.

Stations.	Miles.
Providence, belongs to N. Y. N. H & H. R. R.	0
Olneyville	2 4
Dyerville* (no building)	3.8
Manton	4.3
Lymansville*	4.9
Allendale*	5.7
Centredale	6.4
Graystone*	6.9
Enfield	7.9
Georgiaville	8 8
Stillwater	10.4
Smithfield*	12 3
Primrose*	14.4
Field's Station* (no building)	15.9
Tarkiln	16 9
Oakland	19.7
Harrisville	21 2
Pascoag	22.8
Douglas Junction, Mass.	29 7

RETURN OF WOONSOCKET & PASCOAG RAILROAD COMPANY.

Incorporated May 21, 1889. Woonsocket & Pascoag R. R. leased to New York & New England Railroad Co. for 99 years from March 1, 1891, at an annual rental of $15,000 per annum.

OFFICERS.

Edgar K Ray	President	Franklin, Mass.
Joseph G. Ray	Vice-President	"
James P. Ray	Treasurer	"
Francello G. Jillson	Secretary	Providence, R. I.

DIRECTORS.

Edgar K. Ray	Franklin, Mass.
James P. Ray	"
Joseph G. Ray	"
W. H. Sweatt	City Mills, Mass.
Francello G. Jillson	Providence, R. I.
George H. Norman, Jr	Boston, Mass.
Edward H. Rathbun	Franklin, Mass.
George R. Winsor	"

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$200,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	100,000 00
Floating debt (one or two small claims unsettled)	None.
Total gross debt	100,000 00
Construction account	300,000 00
Equipment account	
All other assets	
Total property and assets	300,000 00

Receipts passenger department	None.
Receipts freight department	None.
Receipts from all sources. Income from rental	15,000 00
Total receipts	15,000 00
Operating expenses	
Interest paid within the year (on funded debt)	5,000 00
Taxes paid within the year	
Salaries and wages	
All other expenditures	
Rate and amount of dividend paid (5 per cent.)	10,000 00
Surplus after paying dividend	None.
Surplus at beginning of year	None.
Total length of road in miles	9 50
Miles of road in this State	9 50
Miles of track in this State reckoned as single track	10.23
Number of regular stopping places in this State	4
Number of flag stations	3
Number of stopping places provided with station buildings	6
Whole number of street or highway grade crossings in this State	9
Number of bridges in this State	12
Number built of stone	None.
Number built of iron	None.
Number built of wood	12

The Woonsocket & Pascoag Railroad extends from Woonsocket to Harrisville. The following is a list of stations in Rhode Island, with distances from Woonsocket. Flag stations designated by *.

Stations.	Miles.
Woonsocket	0
Alice Ave*	1.12
Union Village*	1.40
Forestdale	2.68
Slatersville	3.84
Nasonville	5.71
Glendale	6.95
Oakland Centre*	8.16
Whipples	8.77
Harrisville	8.92

RETURN OF NARRAGANSETT PIER RAILROAD COMPANY.

Incorporated April 12, 1875.

OFFICERS.

John N. Hazard	President	Peace Dale, R. I.
R. G. Hazard	Vice-President and Treas.	"
William T. Stedman	Secretary	"
G. T. Lanphear	Superintendent	"

DIRECTORS.

Benjamin F. Robinson	Wakefield, R. I.
George C. Robinson	Wakefield, R. I.
J. W. Miller	New York City.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$133,800 00
Capital Stock actually paid in (preferred)	None.
Funded debt	95,400 00
Floating debt	None.
Total gross debt	95,400 00
Construction account	211,815 71
Equipment account	27,413 22
All other assets	25,000 00
Total property and assets	264,228 93
Receipts passenger department	30,380 45
Receipts freight department	14,436 87
Receipts from all other sources	4,411 74
Total receipts	49,229 06
Operating expenses	11,547 47
Interest paid within the year	6,678 00
Taxes paid within the year	866 27

Salaries and wages	18,649 76
All other expenditures	5,969 36
Total expenditures	43,710 86
Net earnings	5,518 20
Rate and amount of dividend paid (3 per cent.)	4,014 00
Surplus after paying dividend	21,912 68
Surplus at beginning of year	20,408 48
Expended during year for new rolling stock	5,000 00
Expended during year for repairs of rolling stock	3,760 88
Rolling stock account at beginning of year	44 826 45
Rolling stock account at end of year	27.413 22
Expended for maintenance of way and structures	8,227 52
How much of last account charged to construction account	344 36
How much of same charged to expense amount	7,883 16
Balance of construction account at beginning of year	210,846 35
Balance of construction account at end of year	211,815 71
Total number of passengers carried during the year	127,693
Total number of tons of merchandise carried during the year	19,906
Number of locomotives	2
Number of locomotives equipped with driver brakes	2
Number of passenger train cars 2, combination cars 3	5
Number of passenger train cars equipped with power brakes	All.
Number of passenger train cars equipped with improved quick acting brakes	All.
Number of passenger train cars heated by direct steam	None.
Number of passenger train cars heated by steam heaters	4
Number of passenger train cars heated by common stoves	None.
Number of freight cars	12
Number of freight cars equipped with power brakes	None.
Number equipped with automatic couplers	None.
Total length of road in miles	8½
Miles of road in this State	8½
Miles of track in this State reckoned as single track	8½
Number of regular stopping places in this State	4
Number of flag stations	1
Number of stopping places provided with station buildings	4
Whole number of street or highway grade crossings in this State.	14
Number guarded by gates and flagmen	1
Number guarded by flagmen only	2

Number where electric bells are used	2
Number of farm or private grade crossings	15
Number of bridges in this State	6
Number built of stone	None.
Number built of iron	5
Number built of wood	1
Number combination	None.
Number of new bridges built during the year	None.
Cost of new bridges built during the year	None.
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	2,198
Number of new stations built during the year	None.
Number of passengers killed during the year in this State	None.
Number of passengers injured during the year in this State	None.
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons walking on the track killed	None.
Number of persons walking on the track injured	None.
Number of employees killed	None.
Number of employees injured	1
Average number of persons employed in this State	45
Average rate of fare per mile, local tickets	6½ cts.
Average rate of fare per mile, commutation tickets	2 cts.

The Narragansett Pier Railroad extends from Narragansett Pier to Kingston where it connects with the Stonington Division N. Y. N. H. & H. R. R.

RETURN OF NEWPORT & WICKFORD RAILROAD AND STEAMBOAT COMPANY.

Organized 1870.

OFFICERS.

J. W. Miller.....President and General Manager.....New York.
A. S. Sherman.....Secretary and Treasurer.....Newport, R. I.

DIRECTORS.

J. W. Miller.....New York City.
J. N. A. Griswold.....Newport, R. I.
George Peabody Wetmore ..... "
LeRoy King..... "
Chas. H. Russell..... .....New York City.
A. S. Sherman.....Newport, R. I.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common).....	$100,000 00
Capital Stock actually paid in (preferred).....	None.
Funded debt.....	100,000 00
Floating debt.....	11,905 17
Total gross debt.....	211,905 17
Construction account.....	118,018 70
Equipment account.....	65,000 00
All other assets.....	6,348 77
Total property and assets.....	189,367 47
Receipts passenger department.....	34,772 27
Receipts freight department.....	3,017 63
Receipts from all other sources.....	12,439 83
Total receipts.....	50,229 73
Operating expenses.....	20,250 89
Interest paid within the year.....	5,000 00

Taxes paid within the year	620 65
Salaries and wages	19.169 66
All other expenditures (repairs)	5,373 95
Total expenditures	50,415 15
Net earnings	None.
Rate and amount of dividend paid	None.
Surplus after paying dividend	None.
Surplus at beginning of year	None.
Expended during year for new rolling stock	None.
Expended during year for repairs of rolling stock	5,373 95
Rolling stock account at beginning of year	65,000 00
Rolling stock account at end of year	65,000 00
Expended for maintenance of way (included in repairs)	
How much of last account charged to construction account	None.
How much of same charged to expense amount	All.
Balance of construction account at beginning of year	118,018 70
Balance of construction account at end of year	118,018 70
Total number of passengers carried during year.....about	75,000
Total number of tons merchandise carried during the year	No act kept.
Number of locomotives	1
Number of locomotives equipped with driver brakes	1
Number of passenger train cars	1
Number of passenger train cars equipped with power brakes	1
Number of passenger train cars equipped with improved quick acting brakes	None.
Number of passenger train cars heated by direct steam	1
Number of passenger train cars heated by steam heaters	None.
Number of passenger train cars heated by common stoves	None.
Number of freight cars	None.
Number of freight cars equipped with power brakes	None.
Number equipped with automatic couplers	None.
Total length of road in miles	3 4-10
Miles of road in this State	3 4-10
Miles of track in this State reckoned as single track	4
Number of regular stopping places in this State	3
Number of flag stations	1
Number of stopping places provided with station buildings	3
Whole number of street or highway grade crossings in this State	3
Number guarded by gates and flagmen	3

Number guarded by flagmen only	3
Number where electric bells are used	1
Number of farm or private grade crossings	3
Number of bridges in this State	3
Number built of stone	None.
Number built of iron	None.
Number built of wood	None.
Number combination	3
Number of new bridges built during the year	None.
Cost of new bridges built during the year	None.
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	1,200
Number of new stations built during the year	None.
Number of passengers killed during the year in this State	None.
Number of passengers injured during the year in this State	None.
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons walking on the track killed	None.
Number of persons walking on the track injured	None.
Number of employees killed	None.
Number of employees injured	None.
Average number of persons employed in this State	26
Average rate of fare per mile, local tickets	4½ cts.
Average rate of fare per mile, commutation tickets	2½ cts.

The Newport & Wickford Railroad and Steamboat Co. extends from Newport to Wickford by steamboat, thence to Wickford Junction by railroad, where it connects with Stonington Division N. Y. N. H. & H. R. R.

RETURN OF WOOD RIVER BRANCH RAILROAD COMPANY.

Incorporated July 8, 1872.

OFFICERS.

Amos G. Nichols	President	Hope Valley, R. I.
George H. Olney	Treasurer and Secretary	"
Leander M. Barber	Superintendent	"

DIRECTORS.

Amos G. Nichols	Hope Valley, R I.
Edward Barber	"
George H. Olney	"
John L. Kenyon	Wyoming, R I.
William F. Joslin	Hope Valley, R. I.
Jeremiah B. Gardiner	Providence, R. I.
Benjamin P. Langworthy	Hope Valley, R I.
Benjamin Kenyon	Rockville, R. I.
John J. Greene*	Hope Valley, R. I.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$60,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	56,500 00
Floating debt	14,476 90
Total gross debt	130,976 90
Construction account	111,925 29
Equipment account	13,554 60
All other assets	5,497 01
Total property and assets	130,976 90
Receipts passenger department	4,668 59
Receipts freight department	7,654 28
Receipts from all other sources	750 68

* Elected June 9, 1894, to fill vacancy caused by the death of Charles S. Nichols.

Total receipts	13,073 55
Operating expenses	6,734 36
Interest paid within the year	3,566 28
Taxes paid within the year	405 83
Salaries and wages	5,366 78
All other expenditures	100 50
Total expenditures	16,173 75
Net deficit	3,140 10
Rate and amount of dividend paid	None.
Surplus, after paying dividend	15,286 37
Surplus at beginning of year	18,336 57
Expended during year for new rolling stock	
Expended during year for repairs of rolling stock	727 93
Rolling stock account at beginning of year	13 554 60
Rolling stock account at end of year	13,554 60
Expended for maintenance of way	5,783 04
How much of last account charged to construction account	None.
How much of same charged to expense amount	All.
Balance of construction account at beginning of year	111,824 79
Balance of construction account at end of year	111,915 29
Total number of passengers carried during year	21,309
Total number of tons merchandise carried during the year	9,036
Number of locomotives	2
Number of locomotives equipped with driver brakes	None.
Number of passenger train cars	3
Number of passenger train cars equipped wifh power brakes	3
Number of passenger train cars equipped with improved quick acting brakes	None.
Number of passenger train cars heated by direct steam	None.
Number of passenger train cars heated by steam heaters	2
Number of passenger train cars heated by common stoves	None.
Number of freight cars	None.
Number of freight cars equipped with power brakes	None.
Number equipped with automatic couplers	None.
Total length of road in miles	5.70
Miles of road in this State	5.70
Miles of track in this State reckoned as single track	6,875
Number of regular stopping places in this State	3
Number of flag stations	2

Number of stopping places provided with station buildings	4
Whole number of street or highway grade crossings in this State	4
Number guarded by gates and flagmen	None.
Number guarded by flagmen only	None.
Number where electric bells are used	None.
Number of farm or private grade crossings	14
Number of bridges in this State	2
Number built of stone	None.
Number built of iron	None.
Number built of wood	2
Number combination	None.
Number of new bridges built during the year	None.
Cost of new bridges built during the year	
Tons of new steel rails laid during the year	109
Number of ties laid during the year	2,733
Number of new stations built during the year	None.
Number of passengers killed during the year in this State	None.
Number of persons killed at grade crossings,	None.
Number of persons injured at grade crossings	None.
Number of persons walking on the track killed	None.
Number of persons walking on the track injured	None.
Number of employees killed	None.
Number of employees injured	None.
Average number of persons employed in this State	12
Average rate of fare per mile, local tickets	4 5-10
Average rate of fare per mile, commutation tickets	1 5-10

The Wood River Branch extends from Wood River Junction on the Stonington Division N. Y. N. H. & H. R. R. to Hope Valley. The following is a list of stations with distances from Wood River Junction. Flag stations designated by *.

Stations.	Miles.
Wood River Junction	0
Woodville	3½
Canonchet*	3.70
Hope Valley	5 70

RETURN OF MOSHASSUCK VALLEY RAILROAD COMPANY.

Organized June 11, 1874.

OFFICERS.

Hon. F. C. Sayles	President	Pawtucket, R. I.
F. A. Sayles	Treasurer	"
C. O. Read	Secretary	"
G. M. Clarke	Superintendent	Saylesville, R. I.

DIRECTORS.

Hon. F. C. Sayles	Pawtucket, R. I.
F. A. Sayles	"
Chas. O. Read	"
F. C. Sayles, Jr.	"
R. S. Washburn	Providence, R. I.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$50,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	None.
Floating debt	None.
Total gross debt	50,000 00
Construction account	80,092 19
Equipment account	9,400 00
All other assets	16,237 04
Total property and assets	105,729 23
Receipts passenger department	593 12
Receipts freight department	23,429 22
Receipts from all other sources	None.
Total receipts	24,022 34
Operating expenses	7,067 72

Interest paid within the year....	
Taxes paid within the year....	369 45
Salaries and wages....	10,847 30
All other expenditures....	4,000 00
Total expenditures....	22,284 47
Net earnings....	1,737 87
Rate and amount of dividend paid....	None.
Surplus after paying dividend....	55,729 23
Surplus at beginning of year....	53,991 36
Expended during year for new rolling stock..	None.
Expended during year for repairs of rolling stock....	1,089 36
Rolling stock account at beginning of year....	13,400 00
Rolling stock account at end of year....	9,400 00
Expended for maintenance of way....	1,933 68
How much of last account charged to construction account....	None.
How much of same charged to expense amount....	All.
Balance of construction account at beginning of year....	80,092 19
Balance of construction account at end of year....	80,092 19
Total number of passengers carried during the year....	7,883
Total number of tons of merchandise carried during the year....	73,419
Number of locomotives	2
Number of locomotives equipped with driver brakes....	2
Number of passenger train cars....	2
Number of passenger train cars equipped with power brakes....	2
Number of passenger train cars equipped with improved quick acting brakes....	None.
Number of passenger train cars heated by direct steam....	1
Number of passenger train cars heated by steam heaters....	None.
Number of passenger train cars heated by common stoves....	None.
Number of freight cars....	4
Number of freight cars equipped with power brakes....	None.
Number equipped with automatic couplers....	None.
Total length of road in miles....	2
Miles of road in this State....	2
Miles of track in this State reckoned as single track....	2
Number of regular stopping places in this State....	4
Number of flag stations....	2
Number of stopping places provided with station buildings....	1
Whole number of street or highway grade crossings in this State.	2

Number guarded by gates and flagmen	None.
Number guarded by flagmen only	2
Number where electric bells are used	None.
Number of farm or private grade crossings	None.
Number of bridges in this State	1
Number built of stone	None.
Number built of iron	None.
Number built of wood	1
Number combination	None
Number of new bridges built during the year	None.
Cost of new bridges built during the year	None.
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	927
Number of new stations built during the year	None.
Number of passengers killed during the year in this State	None.
Number of passengers injured during the year in this State	None.
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons walking on the track killed	None.
Number of persons walking on the track injured	None.
Number of employees killed	None.
Number of employees injured	1
Average number of persons employed in this State	20
Average rate of fare per mile, local tickets	2½ cts.
Average rate of fare per mile, commutation tickets	2 cts.

TABLE NO. 1.—*Showing Capital Stock paid in, funded debt, floating debt, total indebtedness, receipts, expenditures and net earnings, for the year ending June 30, 1894.*

NAMES OF CORPORATIONS.	Capital Stock paid in.	Funded Debt.	Floating Debt.	Total Indebtedness.	Receipts.	Expenditures.	Net Earnings.
New York, New Haven and Hartford	$37,942,900 00	$14,150,775 00	$5,614,255 77	$19,765,030 77	$25,686,365 47	$23,312,687 52	$2,373,677 95
Providence and Worcester	3,500,000 00	1,500,000 00		1,500,000 00	446,398 06	95,608 41	350,789 65
Boston and Providence	4,000,000 00	2,170,000 00		2,170,000 00	490,200 00	89,643 95	400,556 05
Providence and Springfield	517,450 00	750,000 00		750,000 00	68,547 00	37,500 00	31,047 00
Newport and Wickford R. R. & S	100,000 00	100,000 00	11,905 17	111,905 17	50,229 73	50,415 15	—185 42
Narragansett Pier	133,800 00	95,400 00		95,400 00	49,229 06	43,710 86	5,518 20
Wood River Branch	60,000 00	56,500 00	14,476 90	70,976 90	13,073 55	16,173 75	—3,140 00
Old Colony	14,187,425 00	13,178,200 00	1,094,393 56	14,272,593 56	1,703,532 66	716,270 16	987,262 50
*Fall River, Warren and Providence							
Providence, Warren and Bristol	437,300 00		38,722 26	38,722 26	23,603 56	1,663 64	21,939 92
New York and New England	23,817,600 00	17,259,061 04	1,397,714 70	18,656,775 74	5,396,776 35	5,968,400 55	—571,624 20
Pawtuxet Valley	100,900 00	160,000 00		160,000 00	7,063 00		7,063 00
Rhode Island and Massachusetts	180,000 00		5,300 00	5,300 00	16,028 99	404 22	15,624 77
Moshassuck Valley	50,000 00				24,022 34	22,284 47	1,737 87
†Warwick Branch							
Woonsocket and Pascoag	200,000 00	100,000 00		100,000 00	15,000 00	5,000 00	10,000 00
‡Coweset Terminal and Transportation Co	300,000 00						
‡Providence, Ponagansett and Springfield	300,000 00						
Totals	$85,527,375 00	$49,519,936 04	$8,176,768 36	$57,696,704 40	$33,990,069 77	$30,359,762 68	$3,630,307 09

* Included in Old Colony. † Included in N. Y. N. H. & H. R. R. ‡ Road not built —Deficit.

TABLE NO. 2.—*Showing date of organization, miles track in Rhode Island, number of locomotives, number of passenger and other cars, with receipts from passengers and from freight, for the year ending June 30, 1894.*

NAMES OF CORPORATIONS.	Date of Organization.	Miles Track in Rhode Island.	Number of Locomotives.	Number of Passenger Train Cars.	Number of Freight Cars.	Receipts from Passengers.	Receipts from Freight.
New York, New Haven and Hartford	Aug. 6, 1872	299.28	669	1,635	11,939	$14,858,328 63	$10,423,546 43
*New York, Providence and Boston	June, 1832						
*Providence and Worcester	1844						
*Boston and Providence	July 2, 1831						
† Providence and Springfield	Sept. 1, 1871	32.78					
Newport and Wickford R. R. & S	1868	4.	1	1		34,772 27	3,017 63
Narragansett Pier	April 12, 1875	8.5	2	5	12	30,380 45	14,436 87
Wood River Branch	July 8, 1872	6.875	2	3		4,668 59	7,654 28
*Old Colony	April 24, 1844	24.07	No rolling	stock.			
*Fall River, Warren and Providence	July 11, 1863		No rolling	stock.			
*Providence, Warren and Bristol	October, 1850	29.14					
New York and New England	April 17, 1873	41.22	212	286	6,237	1,884,132 35	3,125,554 27
*Pawtuxet Valley	July 11, 1872						
†Rhode Island and Massachusetts	June 27, 1871	7.64					
Moshassuck Valley	June 11, 1874	2.	2	2	2	593 12	23,429 22
*Warwick Branch							
†Woonsocket and Pascoag	May 21, 1889	10.39					
Totals		467.78	888	1,932	18,190	$16,812,875 41	$13,597,638 70

* Operated by New York, New Haven & Hartford R. R. † Leased to New York & New England R. R.

TABLE NO. 3.—*Showing number of passengers and tons of merchandise carried for years 1893 and 1894, with increase or decrease in same for year ending June 30, 1894.*

NAMES OF CORPORATIONS.	1893.		1894.		Increase of Passengers.	Increase of Merchandise.
	Total number of Passengers.	Total tons of Merchandise.	Total number of Passengers.	Total tons of Merchandise.		
New York, New Haven and Hartford	23,187,894	6,859,100	44,448,324	8,717,879	21,269,430	1,858,779
*New York, Providence and Boston						
*Providence and Worcester						
*Boston and Providence						
†Providence and Springfield						
Newport and Wickford R. R. & S	70,000		75,000	No. account.	5,000	
Narragansett Pier	109,426	15,700	127,693	19,906	18,267	4,206
Wood River Branch	23,346	12,783	21,339	9,036		
*Old Colony	25,222,836	4,024,087				
*Fall River, Warren and Providence						
*Providence, Warren and Bristol						
New York and New England	9,124,510	3,549,006	8,146,122	2,991,342	—978,388	—557,664
*Pawtuxet Valley						
†Rhode Island and Massachusetts						
Moshassuck Valley	10,194	75,793	7,883	73,419	—2,311	—2,374
*Warwick Branch						
†Woonsocket and Pascoag						
Totals	57,748,206	14,536,469	52,826,331	11,811,582	—4,921,875	—2,724,887

*Included in New York, New Haven and Hartford Railroad. †Included in New York and New England Railroad. —Decrease.

RETURNS

OF

STREET RAILWAY COMPANIES

FOR THE YEAR ENDING JUNE 30, 1894.

RETURN OF UNION RAILROAD COMPANY.

Organized February 2, 1865.

OFFICERS.

Nelson W. Aldrich	President	Providence, R. I.
Chas. H. Perkins	Vice-President	"
A. T. Potter	General Manager	"
C. A. Babcock	Treasurer	"
H. V. A. Joslin	Secretary	"

DIRECTORS.

Nelson W. Aldrich	Providence, R. I.
Benjamin A. Jackson	"
Chas. H. Perkins	"
Gorham P. Pomroy	"
Geo. W. R. Matteson	"
Nicholas Sheldon	"
Arthur H. Watson	"

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$2,000,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	25,000 00
Floating debt	1,648,768 25
Total gross debt	1,673,768 25
Construction account	1,474,931 72
Equipment account	1,220,579 16
All other assets	1,645,361 43
Total property and assets	4,340,872 31
Receipts passenger department	1,107,620 30
Receipts from all other sources	3,880 64
Total receipts	1,111,500 94
Operating expenses	455,135 14
Interest paid within the year	1,166 66
Taxes paid within the year	39,919 77
Salaries and wages	465,448 28
All other expenditures	
Total expenditures	961,669 85
Net earnings	149,831 09
Rate and amount of dividend paid	None.
Surplus	667,104 06
Surplus at beginning of year	517,272 97
Expended during year for new rolling stock	428,342 44
Expended during year for repairs of rolling stock	51,235 72
Rolling stock account at beginning of year	424,634 34
Rolling stock account at end of year	852,976 78
Expended for maintenance of way	113,360 09
How much of last amount charged to construction account	None.
How much of same charged to expense account	All.
Balance of construction account at beginning of year	1,072,712 12
Balance of construction account at end of year	1,474,931 72
Total number of passengers carried during year	22 320,045
Number of horses	76
Number of motor or grip cars	256
Number of passenger cars	205
Total length of road in miles	65 754
Miles of road in this State	65.754

Miles of track	87.133
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	None.
Number of passengers killed during the year in this State	1
Number of passengers injured during the year in this State	7
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons killed	1
Number of persons injured	5
Number of employees killed	None.
Number of employees injured	None.
Average number of persons employed in this State	875
Rate of fare	5 cts.

RETURN OF PAWTUCKET STREET RAILWAY COMPANY.

Organized July 18, 1885.

OFFICERS.

Nelson W. Aldrich	President	Providence, R. I.
Lyman B. Goff	Vice-President	Pawtucket, R. I.
Chas. F. Luther	Sec. and Gen. Manager	"
C. A. Babcock	Treasurer	Providence, R. I.

DIRECTORS.

Nelson W. Aldrich	Providence, R. I.
Lyman B. Goff	Pawtucket, R. I.
Darius L. Goff	"
William G. Roelker	Providence, R. I.
A. T. Potter	"
Chas. H. Perkins	"
Eben N. Littlefield	Pawtucket, R. I.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$200,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	
Floating debt	283,061 70
Total gross debt	283,061 70
Construction account	297,797 36
Equipment account	114,532 00
All other assets	70,732 34
Total property and assets	483,061 70
Receipts passenger department	95,667 85
Receipts from all other sources	418 43
Total receipts	96,086 28

Operating expenses	34,160 49
Interest paid within the year	
Taxes paid within the year	1,740 50
Salaries and wages	55,998 46
All other expenditures	12,513 25
Total expenditures	104,412 70
Net earnings	
Rate and amount of dividend paid	
Surplus, after paying dividend	
Surplus at beginning of year	
Expended during year for new rolling stock	13,428 47
Expended during year for repairs of rolling stock	4,046 04
Rolling stock account at beginning of year	75,910 86
Rolling stock account at end of year	89,339 33
Expended for maintenance of way	6,677 53
How much of last amount charged to construction account	None.
How much of same charged to expense account	All.
Balance of construction account at beginning of year	244,774 07
Balance of construction account at end of year	297,797 86
Total number of passengers carried during year	1,918,912
Number of horses	111
Number of motor cars	15
Number of passenger cars	85
Total length of road in miles	15.466
Miles of road in this State	15.466
Miles of track	17.686
Tons of new steel rails laid during the year	
Number of ties laid during the year	
Number of passengers killed during the year in this State	
Number of passengers injured during the year in this State	
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons killed	1
Number of persons walking on the track injured	None.
Number of employees killed	None.
Number of employees injured	None.
Average number of persons employed in this State	105
Rate of fare	5 cts.

RETURN OF WOONSOCKET STREET RAILWAY COMPANY.

Organized June 4, 1886.

OFFICERS.

James P. Ray	President	Franklin, Mass.
Walter Whittlesey	Treasurer	Chelsea, Mass.
Willard Kent	Secretary	Woonsocket, R. I.
Edgar K. Ray	General Manager	Unionville, Mass.
Herbert M. Young	Superintendent	Woonsocket, R. I.

DIRECTORS.

James P. Ray	Franklin, Mass.
Thomas Martin	Chelsea, Mass.
Walter Whittlesey	"
Henry L. Whittlesey	West Newton, Mass.
Charles H. Wilson	Boston, Mass.
Edgar K. Ray	Unionville, Mass.
Willard Kent	Woonsocket, R. I.

Capital Stock actually paid in (common)	$100,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	160,000 00
Floating debt	8,201 35
Total gross debt	168,201 35
Construction account	199,722 45
Equipment account	38,959 55
All other assets	7,259 34
Total property and assets	245,941 34
Receipts passenger department	30,270 45
Receipts from all other sources	None.
Total receipts	30,270 45
Operating expenses	11,413 21

Interest paid within the year	6,328 66
Taxes paid within the year	746 50
Salaries and wages	12,604 91
All other expenditures	1,220 30
Total expenditures	32,313 58
Net loss	2,043 13
Rate and amount of dividend paid	None.
Surplus after paying dividend	None.
Surplus at beginning of year	None.
Expended during year for new rolling stock	16,409 95
Expended during year for repairs of rolling stock	1,860 31
Rolling stock account at beginning of year	
Rolling stock account at end of year	
Expended for maintenance of way	49,289 97
How much of last amount charged to construction account	48,113 25
How much of same charged to expense account	1,176 72
Balance of construction account at beginning of year	151,609 20
Balance of construction account at end of year	199,722 45
Total number of passengers carried during the year	605,409
Number of horses	20
Number of motor cars	6
Number of passenger cars	10
Total length of road in miles	7
Miles of road in this State	6
Miles of track in this State reckoned as single track	
Tons of new steel rails laid during the year	200
Number of ties laid during the year	4,000
Number of passengers killed during the year in this State	None.
Number of passengers injured during the year in this State	None.
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons walking on the track killed	None.
Number of persons walking on the track injured	None.
Number of employees killed	None.
Number of employees injured	1
Average number of persons employed in this State	23
Rate of fare	5 cts.

RETURN OF NEWPORT STREET RAILWAY COMPANY.

Incorporated July 30, 1888.

OFFICERS.

A. C. Titus	President and Gen. Manager	Newport, R. I.
Francis Burdick	Secretary and Treasurer	"
Robt. P. Lee	Assistant Manager	"

DIRECTORS.

A. C. Titus	Newport, R. I.
J. P. Sanborn	"
T. T. Pitman	"
Darius Baker	"
A. S. Sherman	"
G. B. Reynolds	"
George R. Chase	Middletown, R. I.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$77,000 00
Capital Stock actually paid in (preferred)	30,000 00
Funded debt	50,000 00
Floating debt	9,011 73
Total gross debt	59,011 73
Construction account Equipment account	145,576 48
All other assets	17,683 32
Total property and assets	163,259 80
Receipts passenger department	35,190 99
Receipts from all other sources	897 78
Total receipts	36,088 77
Operating expenses	15,257 84

Interest paid within the year	2,562 75
Taxes paid within the year	800 40
Salaries and wages of employees	12,615 14
All other expenditures	
Total expenditures	31,236 13
Net earnings	4,852 64
Rate and amount of dividend paid (7 per cent on preferred and 5 per cent. on common)	5,950 00
Surplus after paying dividend	None.
Surplus at beginning of year	None.
Expended during year for new rolling stock	
Expended during year for repairs of rolling stock	3,609 75
Rolling stock account at beginning of year	None.
Rolling stock account at end of year	None.
Expended for maintenance of way	1,667 07
How much of last amount charged to construction and equipment account	1,225 00
How much of same charged to expense account	442 07
Balance of construction account at beginning of year	None.
Balance of construction account at end of year	None.
Total number of passengers carried during the year	731,928
Number of horses	
Number of motor cars	9
Number of trailer cars	6
Total length of road in miles	4.17
Miles of road in this State	4.17
Miles of track in this State	4.17
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	None.
Number of passengers killed during the year in this State	None.
Number of passengers injured during the year in this State	None.
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons walking on the track killed	None.
Number of persons walking on the track injured	None.
Number of employees killed	None.
Number of employees injured	None.
Average number of persons employed in this State	20
Average rate of fare	5 cts.

RETURN OF PROVIDENCE CABLE TRAMWAY COMPANY.

Incorporated July 24, 1884.

OFFICERS.

Nelson W. Aldrich	President	Providence, R. I.
A. T. Potter	General Manager	"
C. A. Babcock	Treasurer	"
H. V. A. Joslin	Secretary	"
M. H. Bronsdon	Superintendent	"

DIRECTORS.

Nelson W. Aldrich	Providence, R. I.
Benjamin A. Jackson	"
Charles H. Perkins	"
Gorham P. Pomroy	"
George W. R. Matteson	"
Nicholas Sheldon	"
Arthur H. Watson	"

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$300,000 00
Capital Stock actually paid in (preferred)	None.
Funded debt	
Floating debt	330 00
Total gross debt	330 00
Construction account	167,810 27
Equipment account	118,575 94
All other assets	108,040 87
Total property and assets	394,427 08
Receipts passenger department	142,641 20
Receipts from all other sources	
Total receipts	142,641 20

Operating expenses	60,240 21
Interest paid within the year	
Taxes paid within the year	3,351 36
Salaries and wages	46,203 85
All other expenditures	
Total expenditures	109,795 42
Net earnings	32,845 78
Rate and amount of dividend paid	None.
Surplus	94,097 08
Surplus at beginning of year	61,251 30
Expended during year for new rolling stock	18,265 91
Expended during year for repairs of rolling stock	2,966 88
Rolling stock account at beginning of year	61,767 73
Rolling stock account at end of year	80,033 64
Expended for maintenance of way	6,667 17
How much of last amount charged to construction account	None.
How much of same charged to expense account	All.
Balance of construction account at beginning of year	167,810 27
Balance of construction account at end of year	167,810 27
Total number of passengers carried during year	2,852,824
Number of horses	
Number of motor or grip cars	29
Number of passenger cars	29
Total length of road in miles	3 105
Miles of road in this State	3.105
Miles of track	3.428
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	None.
Number of passengers killed during the year in this State	None.
Number of passengers injured during the year in this State	None.
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons killed	None.
Number of persons injured	1
Number of employees killed	None.
Number of employees injured	None.
Average number of persons employed in this State	70
Rate of fare	5 cts.

RETURN OF INTERSTATE STREET RAILWAY COMPANY.

Organized May, 1891.

OFFICERS.

Cornelius S. Sweetland	Receiver	Providence, R. I.
H. M. Daggett, Jr.	President	Attleboro, Mass.
William N. Otis	Treasurer	Providence, R. I.
Walter H. Barney	Secretary	"

DIRECTORS.

William H. Haskell	Pawtucket, R. I.
William A. Walton	Providence, R. I.
Henry W. Harvey	"
Peter Nerney	Attleboro, Mass.

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$422,500 00
Capital Stock actually paid in (preferred)	None.
Funded debt	125,000 00
Floating debt	332,558 89
Total gross debt	457,558 89
Construction account	562,777 48
Equipment account	114,524 18
All other assets	177,908 93
Total property and assets	855,210 59
Receipts passenger department	53,433 40
Receipts from all other sources	303 39
Total receipts	53,736 79
Operating expenses	19,914 02
Interest paid within the year	
Taxes paid within the year	189 65
Salaries and wages	25,968 58

All other expenditures	
Total expenditures	46,072 25
Net earnings (exclusive of interest which was not paid)	7,664 54
Rate and amount of dividend paid	None.
Surplus, after paying dividend	None.
Surplus at beginning of year	None.
Expended during year for new rolling stock	3,572 34
Expended during year for repairs of rolling stock	3,640 01
Rolling stock account at beginning of year	59,717 52
Rolling stock account at end of year	114,524 18
Expended for maintenance of way	4,170 16
How much of last amount charged to construction account	None.
How much of same charged to expense account	All.
Balance of construction account at beginning of year	431,930 21
Balance of construction account at end of year	562,777 48
Total number of passengers carried during year	1,116,307
Number of motor cars	24
Number of passenger cars	16
Total length of road in miles	23.99
Miles of road in this State	4.41
Miles of track in this State reckoned as single track	4.63
Tons of new steel rails laid during the year	None.
Number of ties laid during the year	None.
Number of passengers killed during the year in this State	None.
Number of passengers injured during the year in this State	None.
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons killed	None.
Number of persons walking on the track injured	None.
Number of employees killed	None.
Number of employees injured	None.
Average number of persons employed in this State	72
Rate of fare	5 cts.

RETURN OF PAWCATUCK VALLEY STREET RAILWAY COMPANY.

Organized May 25, 1893. Not opened until July 15, 1894.

OFFICERS.

William Hoxsey	President	Westerly, R. I.
Samuel H. Cross	Treas. and Secretary	"
E. P. Shaw, Jr.	General Manager	Norwich, Ct.
E. K. Day	Superintendent	Westerly, R. I.

DIRECTORS.

Nathan F. Dixon	Westerly, R. I.
Charles Perrin	"
William Hoxsey	"
Samuel H. Cross	"
Solomon Lucas	Norwich, Conn.
E. P. Shaw, Jr.	"

Returns for the year ending June 30, 1894.

Capital Stock actually paid in (common)	$75,000 00
Number of motor cars	6
Total length of road in miles	6
Miles of road in this State	6
Miles of track in this State reckoned as single track	6
Tons of new steel rails laid during the year	
Number of ties laid during the year	
Number of passengers killed during the year in this State	None.
Number of passengers injured during the year in this State	None.
Number of persons killed at grade crossings	None.
Number of persons injured at grade crossings	None.
Number of persons walking on the track killed	None.

Number of persons walking on the track injured	None.
Number of employees killed	None.
Number of employees injured	None.
Average number of persons employed in this State	20
Rate of fare per mile, local tickets	1 6-10 cts.

RETURN OF PAWTUXET VALLEY ELECTRIC STREET RAILWAY COMPANY.

Organized July 23, 1893. Road not operated until after June 30, 1894.

OFFICERS.

Nelson W. Aldrich	President	Providence, R. I.
Henry L. Greene	Vice-President	River Point, R. I.
C. A. Babcock	Treasurer	Providence, R. I.
H. V. A. Joslin	Secretary	"

DIRECTORS.

Nelson W. Aldrich	Providence, R. I.
Henry L. Greene	River Point, R. I.
C. A. Babcock	Providence, R. I.
H. V. A. Joslin	"
Charles H. Perkins	"
Marsden J. Perry	"
Gorham P. Pomroy	"
William G. Roelker	"
Arthur H. Watson	"

STREET RAILWAY COMPANIES

TABLE No. 4.—*Showing names of Corporations, Capital Stock paid in, funded debt, floating debt, total indebtedness, total receipts, expenditures and net earnings, for the year ending June 30, 1894.*

NAMES OF CORPORATIONS.	Capital Stock paid in.	Funded Debt.	Floating Debt.	Total Indebtedness.	Receipts	Expenses.	Net Earnings.
Union Railroad Co., Providence....	$2,000,000 00	$25,000 00	$1,648,768 25	$1,673,768 25	$1,111,500 94	$961,669 85	$149 831 09
Pawtucket Street Railway Co.....	200,000 00	.....	283,061 70	283,061 70	96,086 28	104,412 70	—8,326 42
Woonsocket Street Railway Co.....	100,000 00	160,000 00	8,201 33	168,201 33	30,270 45	32,313 58	—2,043 13
Newport Street Railway Co.....	107,000 00	50,000 00	9,011 73	59,011 73	36,088 77	31,236 13	4,852 64
Providence Cable Tramway Co.....	300,000 00	.....	330 00	330 00	142,641 20	109,795 42	32,845 78
Interstate Street Railway Co.....	422,500 00	125,000 00	332,558 89	457,558 89	53,736 79	46,072 25	†7,664 54
Pawcatuck Valley Street Railway Co.	100,000 00	.....	.....	.....	.....	.....	.....
Pawtuxet Valley Electric Street Railway Co*.....	10,000 00	.....	.....	.....	.....	.....	.....
‡Tiverton and Seaconnet Point Railway Co.....	.....	.....	.....	.....	.....	.....	.....
Total.....	$3 239.500 00	$360,000 00	$2,281,931 90	$2,641,931 90	$1,470,324 43	$1,285,499 93	$184,824 50

* Under construction at time of report.

† Exclusive of interest, which was not paid.

‡ Capital stock fixed by charter at $200,000, but no return of organization, etc., received.

STREET RAILWAY COMPANIES.

TABLE NO. 5.—*Comparison of receipts, expenses and net earnings of the Street Railway Companies, for the year ending June 30, 1894, with returns of previous year.*

NAMES OF CORPORATIONS.	1893.			1894.		
	Total Receipts.	Total Expenses.	Net Earnings.	Total Receipts.	Total Expenses.	Net Earnings.
Union Railroad Company, Providence..	$1,033,262 94	$856,841 48	$176,421 46	$1,111,500 94	$961,669 85	$149,831 09
Pawtucket Street Railway Company....	100,235 67	96,830 15	3,405 52	96,086 28	104,412 70	—8,326 42
Woonsocket Street Railway Company...	29,754 63	28,242 49	1,512 14	30,270 45	32,313 58	—2,043 13
Newport Street Railway Company.....	39,591 16	34,535 30	5,055 86	36,088 77	31,236 13	4,852 64
Providence Cable Tramway Company ..	152,210 60	125,210 15	27,000 45	142,641 20	109,795 42	32,845 78
Interstate Street Railway Company.....	39,395 30	41,571 92	—2,176 62	53,736 79	46,072 25	†7,664 54
*Pawcatuck Valley Street Railway Co..						
*Pawtuxet Valley Electric Street Railway Company.....						
‡Tiverton and Seaconnet Point Street Railway Company.....						
Total.....	$1,394,450 30	$1,183,251 49	$211,198 81	$1,470,324 43	$1,285,499 93	$184,824 50

*Not in operation until after June 30, 1893. †Exclusive of interest which was not paid. ‡Charter taken out but road not built.

STREET RAILWAY COMPANIES.

TABLE No. 6.—*Showing date of organization, miles track, number of horses, number of motor and other cars, with total number of passengers carried for the year ending June 30, 1894, and increase or decrease over previous year.*

NAMES OF CORPORATIONS.	Date of Organization.	Miles Track.	Number Horses.	Number Motor Cars.	Number other Cars.	Number of passengers Carried.	Increase over last year.
Union Railroad Company, Providence	February 2, 1865	87.133	76	256	205	22,320,045	1,590,628
Pawtucket Street Railway Company.....	July 18, 1885	17.686	111	15	35	1,913,912	—62,749
Woonsocket Street Railway Company	June 4, 1886	6.	20	6	10	605,409	13,454
Newport Street Railway Company.....	July 30, 1888	4.17	.....	9	6	731,928	—75,226
Providence Cable Tramway Company.	Incorporated 1884 Road built 1889 Opened Jan. 1, 1890	3.428	.....	29	29	2,852,824	—191,388
*Interstate Street Railway Company.....	May 1891	4.63	.....	24	16	1,116,307	484,884
†Pawcatuck Valley Street Railway Co.....	May 26, 1893	6.	.....	6	.....	.....	.....
†Pawtuxet Valley Electric Street Railway Company.....	Oct. 6, 1891	.....	.....	.....	.....	.....	.....
‡Tiverton and Seaconnet Point Street Railway Company.....	May 26, 1893	.....	.....	.....	.....	.....	.....
Total.....		123.047	207	345	301	29,510,425	1,759,603

*Power house destroyed by fire Jan. 2, 1894, and the road not operated since that date. †Charter taken out but road not in operation at date of report. ‡Charter taken out but no return made. — Decrease.

CORRESPONDENCE.

The correspondence of the office still continues to increase and is not confined to residents of this State. I give herewith such portions of it as may be of interest to the public.

TOWN CLERK'S OFFICE,
EXETER, R. I., Jan. 13, 1894.

HON. E. L. FREEMAN,
Railroad Commissioner:

DEAR SIR:—In October last our Town Council ordered a night flagman stationed at the Champlin crossing referred to in the enclosed letter.

By instruction of our Town Council I write to ask for your opinion on certain points involved in the request of the enclosed letter.

1. Should the Council grant the petition of such letter would the town thereby become responsible for any damage that might accrue at said crossing by the night watchman being withdrawn?

2. The watchman having been ordered on petition of certain citizens, would it be policy to allow him to be taken off now, the same conditions existing now as before order was given. An early return of the enclosed letter will greatly oblige.

Respectfully yours,
JOHN H. EDWARDS,
Town Clerk.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., Jan. 17, 1894.

JOHN H. EDWARDS, ESQ.,
Town Clerk of Exeter:

DEAR SIR:—Your favor of 13th inst. received and contents noted. As I understand the situation is as follows: Upon the petition of certain citizens your

Town Council ordered the New York, New Haven & Hartford Railroad Co. to place and maintain a night watchman at the grade crossing known as Champlin crossing, in said town. The Company complied with the order, and then after a count of the number of persons and teams that used that crossing in the night time for a month, thinking that the expense was very large for the benefit derived therefrom, petitioned your Honorable body that they might be relieved from the duty of maintaining a flagman at that crossing during the night time. You now ask: "Should the Company grant the petition would the town thereby become responsible for any damage that might accrue at said crossing by the night watchman being withdrawn?" While this would be a question for the courts to decide, yet I know of no law or decision under or by which a town becomes liable for damages at a grade crossing, beyond the limits of its own highway, or in other words, upon the road-bed of the railroad company. My opinion is that the placing or withdrawing a flagman at a grade crossing, by order or permission of the Town Council makes no difference as to the legal responsibility of the town.

Your second question, "The watchman having been ordered on petition of certain citizens, would it be policy to allow him to be taken off now, the same conditions existing now as before order was given?" This is a question for the Council alone to determine. The matter of ordering flagmen at grade crossings should be determined after a full and fair hearing of parties interested, and should depend very largely upon the situation at the crossing. If it is an open crossing, without obstruction, where trains can be seen or heard approaching from either direction, there is much less need of a flagman than if the view is obstructed by buildings, high banks, trees, etc.

Again, another consideration that should enter into the decision should be the number and speed of trains that pass the crossing during the time alluded to; and also the amount of travel across the said crossing during the night time or time referred to.

These are all questions for your Town Council to decide. While safety is the first consideration to be regarded in all such cases, yet the railroad should not be burdened with unnecessary expenses, for all such expenditures in the end come out of the public.

I think it would be a fair way to give a hearing to the railroad company and to the petitioners for a watchman at said crossing, at which all the facts might be presented, and then the Council could decide the matter upon said facts and upon their own knowledge of all the circumstances of the case.

I trust I have made my meaning clear and that this question may be settled in a way that shall be satisfactory to all concerned. Perhaps the warning needed

might be obtained by having an electric bell at the crossing that should ring upon the approach of trains.

Respectfully yours,

E. L. FREEMAN,

Commissioner of Railroads.

NEW YORK & NEW ENGLAND RAILROAD CO.,

PROVIDENCE, March 2, 1894.

HON. E. L. FREEMAN,

State R. R. Commissioner:

DEAR SIR:—At present we are operating the line between Brayton street and Olneyville Junction under a telegraphic "Block" system, and are desirous of extending our yard limits to Olneyville Junction, instead of Brayton street, to facilitate the work. I understand the present system was recommended by your predecessor and under the circumstances would like your permission to make the change. Any information on the subject that you may require I will be pleased to give, and would request an answer at your earliest convenience.

Yours respectfully,

G. W. OFFUTT,

Superintendent.

OFFICE OF RAILROAD COMMISSIONER,

PROVIDENCE, R. I., March 5, 1894.

G. W. OFFUTT, ESQ.,

Supt. New York & New England R. R. Co.:

DEAR SIR:—Your favor of 2d inst., asking my permission to change yard limits in Providence so as to extend same from Brayton street to Olneyville Junction, received. The Railroad Commissioner in this State has no power to give orders in regard to methods of managing or operating railroad lines. He can only recommend. As far as proposed change is concerned, I have no objection, *provided* no change is to be made which will have a tendency to increase in any manner the liability of danger to passengers or employees.

Respectfully yours,

E. L. FREEMAN,

Commissioner of Railroads.

OFFICE OF RAILROAD COMMISSIONER,

PROVIDENCE, R. I., March 16, 1894.

A. C. KENDALL, ESQ.,

General Passenger Agent Old Colony System:

DEAR SIR:—Miss————has handed me a communication received from your office 14th inst., asking that $1.00 be sent for her fare, etc.

The circumstances are as follows: Miss———and a Miss———are employed in Providence but live in Pawtucket, going back and forth each day, and Miss——also goes home to her dinner. They had an engagement in Boston for the evening of the 13th inst, and when out home at noon on that day Miss ———bought a five trip ticket for Boston, intending to take the 5:40 train from Providence. She was delayed at the office and so took the next train, 6:20. She did not know that this train did not stop at Pawtucket until they passed the station She offered the conductor the five trip ticket from Pawtucket to Boston, and the coupon book from Providence to Pawtucket, but the conductor refused to take these tickets, notwithstanding the explanation offered, and they refused to pay their fare. She is willing and ready to send the two tickets, as offered. I know personally these two young ladies and their statements can be depended upon. They had no design to defraud the railroad or to evade fare, in the case.

It seems to me that the policy pursued in this and other cases of a similar nature, is a narrow and unwise one, to say the least, and has a tendency to create needless friction between the railroad and its patrons, something which I think should be avoided, wherever it could be done without the sacrifice of principle. A liberal policy in every kind of business, railroading included, in the long run, is not only the most satisfactory to all parties, but also the most profitable A distinction should be made between those who intentionally try to *beat* a railroad company and others, who by force of circumstances, not of their own contriving, are placed in apparently the same position. As a very successful railroad manager said to me, "rules are not intended to oppress or inconvenience honest passengers, but to protect the roads from dead-beats."

Respectfully yours,

E. L. FREEMAN,

Commissioner of Railroads.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD CO.,
OLD COLONY SYSTEM,
OFFICE OF GENERAL PASSENGER AGENT,
BOSTON, MASS., March 17, 1894.

HON. E. L. FREEMAN,
Railroad Commissioner, Providence, R. I.:

DEAR SIR:—I beg to acknowledge the receipt of your favor of the 16th inst., in regard to our claim against Miss———and Miss——— for fare from Providence to Boston. Under the circumstances as explained in your letter, we shall be pleased to accept the coupons tendered our conductor by the ladies in payment of fare.

In this connection I beg to assure you that it is not our intention to make any rules the carrying out of which will prove a hardship or source of annoyance to our patrons. As a business man you will of course appreciate the importance of our adopting certain regulations and placing our employees under restrictions in dealing with the public, rather than allow each man to use his own judgment. I agree with you that a liberal policy should be maintained whenever it can be maintained without the sacrifice of principle. If you will kindly have Misses ———and———— forward the coupons presented on the train, I shall feel much obliged.

Truly yours.

A. C. KENDALL,

General Passenger Agent.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., March 26, 1894.

E. G. ALLEN, ESQ.,

General Superintendent Old Colony System:

DEAR SIR:—I enclose slip from Pawtucket Evening Post of Saturday, in relation to gilt edge train running by station at Pawtucket last Friday afternoon. I did not see the affair, but my attention has been called to it by several citizens of Pawtucket, among them the cashier of the First National Bank. Quite a feeling has been stirred up about it. I thought it best that the affair should be reported.

Respectfully yours,

E. L. FREEMAN,

Commissioner of Railroads.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD,
GENERAL SUPERINTENDENT'S OFFICE,
BOSTON, MASS., March 28, 1894.

HON. E. L. FREEMAN,

Railroad Commissioner, Providence, R. I.:

MY DEAR SIR:—I beg to acknowledge receipt of your favor of March 26th, with clipping from Pawtucket Post of Saturday, regarding the "Gilt Edge" train running by the station at Pawtucket last Friday afternoon, and I thank you for calling my attention to the matter.

I have taken this matter up with Superintendent Marshall of the Providence Division, and think that the trouble will not occur again in the near future.

Yours very truly,

E. G. ALLEN,

General Superintendent.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD,
GENERAL SUPERINTENDENT'S OFFICE,
BOSTON, MASS., April 6, 1894.

HON. E. L. FREEMAN,
Railroad Commissioner, State of Rhode Island, Providence, R. I.:

DEAR SIR:—Again referring to your letter of March 26th, with clipping from the Pawtucket Evening Post, with reference to the "Gilt Edge" train running by the station at Pawtucket, I beg to call your attention to the letter of Superintendent Marshall next attached, together with explanatory papers from our Electrician Scott, by which it will appear that the engineer of train number 87 was in fault in this instance, and for same he has been suspended from duty. I also call your attention to Superintendent Marshall's notice to engine men, and if this does not bring about a greater degree of care in handling trains by Pawtucket station, we will endeavor to find a remedy that will be of sufficient power to bring about the desired result.

Our signal arrangement at Pawtucket for the government of trains moving in opposite directions by the station is a very good one if lived up to by our train operatives there, and there ought to be no occasion for complaint.

I will thank you to return papers after receiving your attention, to me for my files. Again thanking you for bringing the matter directly to my attention I remain,

Yours very truly,

E. G. ALLEN,
General Superintendent.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., April 7, 1894.

E. G. ALLEN, ESQ.,
General Superintendent Old Colony System:

DEAR SIR:—Your favor of yesterday with contents, received and noted. I herewith return enclosures as requested. The action that has been taken in regard to engineman number 87 train will have a good effect. It is also a step in the right direction to slow down trains passing station bound south, and it would be still better if it also applied to north-bound trains as well. I wish you would also caution engineers about running between passenger trains and station at Woodlawn. I have had several complaints but did not wish to trouble you. South-bound trains as you are aware come round a sharp curve very near the station, and then go between local trains and station. I could give several instances when it has been done, but prefer to have engineers notified about it be-

fore making complaints. There are several Old Colony trains due at Woodlawn at about the same time as locals.

Respectfully yours,

E. L. FREEMAN,

Commissioner of Railroads.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD,
GENERAL SUPERINTENDENT'S OFFICE,
BOSTON, MASS., April 9, 1894.

HON. E. L. FREEMAN,

Railroad Commissioner, State of Rhode Island, Providence, R. I.:

DEAR SIR:—I beg to acknowledge receipt of your favor of April 7th, together with return of papers sent you on the 6th, and I note what you say in regard to running between passenger trains at Woodlawn station. I have taken the matter up with Superintendents Marshall and Spencer and they will get out a joint circular of instructions to enginemen, to reduce speed at that point and avoid future complications of that kind.

I beg to thank you for calling my attention to the matter and trust there will be no further cause for complaint from that source.

Yours very truly,

E. G. ALLEN,

General Superintendent.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD,
GENERAL SUPERINTENDENT'S OFFCE,
BOSTON, MASS., April 16, 1894.

HON. E. L. FREEMAN,

Railroad Commissioner, State of Rhode Island, Providence, R. I.:

DEAR SIR:—Having reference to your favor of April 7th, and taking up the matter to which you refer therein, concerning passenger trains at Woodlawn station, I beg to call your attention to the joint notice issued by Superintendents Marshall and Spencer (see third paper) which requires all south bound trains to approach that station at such a reduced speed as will allow them to stop before reaching the station if train is to be seen there or north bound train is about to pass. Will be glad to have you return all papers after same have been noted by you and oblige,

Yours very truly,

E. G. ALLEN,

General Superintendent.

CONSOLIDATED CAR-HEATING CO.
ALBANY, N. Y., April 14, 1894.

E. L. FREEMAN, ESQ.,
Rhode Island Railroad Commission, Providence, R. I.:

DEAR SIR:—Will you kindly inform us what are the laws of your State with reference to heating steam railway cars and what with reference to heating street railway cars?

The economy and safety of heating steam railway cars by steam from the locomotive has appealed so largely to railway companies that we have already equipped over 5,000 cars. Electric street railways are finding heating by electricity the most economical method and during this past winter cars in over 50 cities of the United States and Canada were thus heated by us.

We inclose herewith a brief which may be of interest.

Very respectfully yours,
CONSOLIDATED CAR-HEATING CO.,
BY WILLIAM G. RICE,
Vice-President and Treasurer.

OFFICE OF RAILROAD COMMISSIONER.
PROVIDENCE, R. I., April 16, 1894.

CONSOLIDATED CAR-HEATING CO.,

GENTLEMEN:—In regard to yours of 14th inst., there is no law in this State in regard to the heating of street cars; railway cars are allowed to be heated by heaters approved by the Railroad Commissioner. No stoves are allowed. Baker's or Johnson's heaters are used in a few cars on short trains but nearly all the cars in the State are heated by steam.

Respectfully yours,
E. L. FREEMAN,
Commissioner of Railroads.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., April 18, 1894.

HON. E. G. ALLEN,
General Supt., Old Colony System, N. Y., N. H. & H. R. R.

DEAR SIR:—A prominent citizen of Providence, complains that the mileage books issued by your company do not contain the names of stations and distances between Providence and Boston, and also between Providence and New Haven. Would it be much trouble when a new issue is made of those books to have these

stations and the distances printed in the books? It certainly would be for the convenience of those who use them, and in some cases would prevent mistakes as to the number of tickets to be torn out by conductor.

I return herewith the documents sent me and trust the measures you have taken will prevent the running of trains by the stations specified.

With regards, I am,

Respectfully yours,

E. L. FREEMAN,
Commissioner of Railroads.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD,
GENERAL SUPERINTENDENT'S OFFICE,
BOSTON, MASS., April 20, 1894.

HON. E. L. FREEMAN,
Railroad Commissioner, State of Rhode Island, Providence, R. I.:

DEAR SIR:—I beg to acknowledge receipt of your favor of April 18th, and noting your suggestion concerning names of stations and the distances between them, in the mileage books, I have referred that portion of the letter to General Passenger Agent Kendall for his consideration.

Yours very truly,

E. G. ALLEN,
General Superintendent.

BOARD OF STATE HOUSE COMMISSIONERS,
PROVIDENCE, R. I., June 19, 1894.

HON. E. L. FREEMAN,
Commissioner of Railroads:

DEAR SIR:—Will you kindly send to me in writing any suggestions you may have regarding the rooms assigned to you in the new State House, and oblige,

Yours truly,

E. K. GLEZEN,
Secretary.

OFFICE OF RAILROAD COMMISSIONER.
PROVIDENCE, R. I., June 20, 1894.

BOARD OF STATE HOUSE COMMISSIONERS,

GENTLEMEN:—In answer to yours of yesterday would say that when Gov. Ladd was preparing plans for new State House, he provided for two rooms for

the R. R. Commissioner, one for an office, and one *larger* where he could hold investigations and give hearings. There should be two good rooms, with suitable toilet arrangements. As the office is now situated the Insurance Department has been obliged to take so much of the room that the Commissioner has barely room for a desk and a bookcase, and even this room is needed by Insurance Department. My recollection of the rooms proposed by Gov. Ladd, is that they were ample in size, etc.

Respectfully yours,

E. L. FREEMAN,

Railroad Commissioner.

FORESTDALE MANUFACTURING CO.,
FORESTDALE, P. O , R. I., June 20, 1894.

HON. E. L. FREEMAN,

Railroad Commissioner for Rhode Island:

DEAR SIR:—In 1892 (or early 1893) a road was laid out at this place across Branch River under or over Woonsocket and Pascoag division N. Y. & N. E. R. R. The bridge was built across the Branch River and there the matter halts.

Some here do not know whether difficulties are placed in the way to side track this highway, or whether there is really some real trouble because of the N. Y. & N. E. Railroad, and as your name has been frequently mentioned as authority for such a reason, I knew I might get from you a statement at first hand that would be reliable and so have taken the liberty to address you making inquiry as to the part the railroad has as a hindrance to further progress.

Yours truly,

CHAS. E. THOMAS,

Treasurer.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., June 21, 1894.

CHARLES E. THOMAS, ESQ.,

Treasurer Forestdale Manufacturing Co:

DEAR SIR:—Your favor of 20th inst. received. I do not understand from your communication what the situation is in regard to crossing the track of Woonsocket and Pascoag Railroad. If you intend to go under the track the Commissioner has nothing to say in the matter, or if you propose to cross the railroad with an overhead bridge; but if the highway is to cross the railroad at grade, it cannot be laid out or built without my consent in writing. My consent has not, to my knowledge, been asked; if it is, will come up, examine the premises and

give decision ; but I am very much opposed to grade crossings and hope that you will decide to go under the railroad.

Respectfully yours,

E. L. FREEMAN,

Commissioner of Railroads.

JACKSONVILLE, FLA., Aug. 7, 1894.

HON. E. L. FREEMAN,

Chairman R. R. Com., Providence, R. I.:

DEAR SIR :—The question of a Railroad Commission is now agitating the people of Florida and I would thank you to advise me as fully as you may be inclined, as to what has been accomplished in your State by your Commission and legislative restraint of railroad corporations, both as to the railroads and as to the State, the people and the various interests in the State. The experience of other States and results there would be of value in determining whether such legislation would likely be advantageous here, and if so, in what respects. I shall be indebted for your reply.

Yours truly,

D. U. FLETCHER.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., Sept. 17, 1894.

D. U. FLETCHER, ESQ.,

DEAR SIR :—Absence from city is the reason yours of Aug. 12th was not answered before. We have a railroad commission consisting of one. The question of rates of fare and of freight does not have much prominence with us. The great questions with us are the safety, convenience and comfort of passengers. In these respects I think the Railroad Commissioner has accomplished considerable. His work has been generally approved by all parties, and I don't think our citizens would be willing to have the commission given up.

Yours, etc.,

E. L. FREEMAN,

Railroad Commissioner.

EAST GREENWICH, R. I., Oct. 23, 1894.

HON. EDWARD L. FREEMAN,

Railroad Commissioner, Central Falls, R. I.:

DEAR SIR :—We desire to know whether it is within the jurisdiction of Town Councils to pass an ordinance of the nature of that which I enclose on printed clipping from a newspaper.

You will note that the legal opinions quoted refer more particularly to the question of shifting responsibility in case of accident. Of course the Council may pass whatever ordinances it chooses, but, in your opinion, would such an ordinance as that referred to be valid, and could it be legally enforced?

Do you know of any towns in this State that have passed similar ordinances?

This matter comes up for consideration at the regular meeting on Thursday of this week, so an early reply will greatly oblige the members of our Town Council.

Very respectfully yours,

V. J. BRIGGS,
President of Town Council.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., Oct. 22, 1894.

HON. V. J. BRIGGS,

President Town Council, Town of East Greenwich:

DEAR SIR:—Your favor of this date received. You ask whether it is within the jurisdiction of Town Councils to pass an ordinance of the nature of the one you enclose, which forbids employees of railroad companies from blowing locomotive whistles within the corporate limits of the town of East Greenwich, and fixing a penalty for its violation, and if in my opinion such an ordinance would be valid, and could be legally enforced. Under the police powers given to Town Councils, by the last paragraph of Section 20, Chapter 38 of the Public Statutes, it would seem that the Town Council of your town would have ample power to pass such an ordinance, especially as you have the authority of several physicians that the practice of blowing whistles at your several railroad crossings is very annoying to invalids and tends to retard their recovery. If the matter should be contested by the Railroad Company, it would require probably a decision of the Supreme Court to settle it. I should suppose, however, that if the ordinance is properly drawn and legally adopted, there would be no trouble about its enforcement; if there should be, an act could be passed by the General Assembly which would provide for the whole subject. You also ask whether any of the towns of the State have passed similar ordinances?

I believe the city of Providence passed some ordinance in regard to the management of locomotives, etc., including the ringing of bells, but do not think it was ever enforced. I think you would have no trouble about the enforcement of such an ordinance.

Respectfully yours,

E. L. FREEMAN,
Railroad Commissioner.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., Nov. 10, 1894.

E. G. ALLEN, ESQ.,

General Superintendent Old Colony System:

DEAR SIR:—I am informed that at 8:55 o'clock, this A. M., while north-bound passenger train from Providence was at Pawtucket station, receiving and discharging passengers, an Old Colony passenger train, south-bound, engine number 860, came into the station at usual speed and stopped at usual place. Men and women who were taking or leaving train were scattered, and there were several narrow escapes. My informant, a prominent business man and manufacturer, also a member of the Legislature, said he thought some one would be killed, and that "it was a d———d wicked thing." Will you look the matter up and oblige

Yours, etc.,

E. L. FREEMAN.

Railroad Commissioner.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD,
GENERAL SUPERINTENDENT'S OFFICE,
BOSTON, MASS., Nov. 17, 1894.

HON. E L. FREEMAN,

Railroad Commissioner, State of Rhode Island, Providence, R. I.:

DEAR SIR:—Replying to your favor of November 10th, in regard to south-bound passenger train running into Pawtucket station while north bound passenger train was receiving and discharging passengers on November 10th, I beg to advise that we have given this matter a thorough investigation, and find that our electric signals which are for the protection of this station and should have shown danger, as a matter of fact did show at safety, owing to the interference of the electric railroad current at Broad street, which seems to be causing us considerable trouble at that point, and under the circumstances we find the engineer to have been blameless; but to properly protect the station in the future, Superintendent McAlpine has issued an order, a copy of which I attach for your information, requiring all trains to approach the station under full control, regardless of the position of the signals, and be prepared to stop before reaching the station platforms, if a passenger train is standing at or approaching the station, and the train so stopped must not proceed until the opposing train has cleared the station. I think that this will prevent a recurrence of that particular trouble at Pawtucket, and trusting that the explanation will be perfectly satisfactory, I remain,

Yours very truly,

E. G. ALLEN,

General Superintendent.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD CO.,
SUPERINTENDENT'S OFFICE, PROVIDENCE DIVISION,
BOSTON, MASS., November 13, 1894.

No. 2. NOTICE TO ENGINEMEN.

It has been found that on account of the electric street railroad crossing our tracks at Broad Street, special electric distant signals K and L at Pawtucket are unreliable, and it is ordered that hereafter, regardless of the position of these signals, all trains approach Pawtucket station under full control and prepared to stop before reaching the station platforms if a passenger train is standing at, or approaching, the station, and the train so stopped must not proceed until the opposing train has cleared the station. Trains will be governed as to their priority by General Rule No. 114. This order is imperative, and no excuse will be accepted for its violation.

CHAS. A. McALPINE,
Superintendent.

Detach and send receipt at once to

MR. C. A. McALPINE, Supt.,
BOSTON,

DEAR SIR:—Your notice number two, under date of November 13th, having reference to the passing of trains at Pawtucket station, has been received, and is understood.

(Sign here) Yours,
ENGINEMAN.

Nov. , 1894.

OFFICE OF THE MAYOR,
NEWARK, N. J., Nov. 14, 1894.

The President of the Board of State Railway Commissioners, Providence, R. I.:

DEAR SIR:—Mayor Lebkuecher, of this city, would like to know what provisions, if any, have been made in your State, either by statute or ordinance, for the abolition of grade crossings by steam railroads.

Have the cities borne any part of the expense where this has been accomplished?

Have the railroads made such changes voluntarily, or have they been compelled to do so by the State or local authorities?

The information you may give will be sincerely appreciated by the Mayor.

Very truly yours,
JOHN S. GIBSON,
Mayor's Secretary.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., Nov. 16, 1894.

To His Honor, MAYOR LEBKUECHER,

DEAR SIR:—Your favor of 14th inst. received; I have this day mailed to your address a copy of the laws of this State relating to railroads.

The railroads have themselves abolished several grade crossings in the city of Providence; in some cases the city discontinued the highway or street and the railroad company paid all expenses. The most important one that was abolished was at Charles street, where two streets were merged in one, new land taken and an overhead bridge built. In this case the railroads built and maintain the bridge, the city changed the layout of the streets and paid all land damages.

It has generally been understood that where a grade crossing was abolished by request of city or town, that the railroad would pay 65 per cent. of total cost; the city or town 35 per cent. The railroads are more desirous of abolishing grade crossings than are the cities and towns.

Truly yours,

E. L. FREEMAN,
Railroad Commissioner.

STILLWATER, R. I., Dec. 15, 1894.

COL. E. L. FREEMAN,

Railroad Commissioner for Rhode Island, Central Falls, R. I.,

DEAR SIR—I beg leave to inquire for the information of our Town Council

1st. If you approve of the device for a bell alarm at grade crossings, and

2d. If you would recommend for such crossings as those in the villages of Georgiaville and Enfield, which I learn you have recently inspected, the substitution of the bell alarm for flagmen?

3d. How near the crossing would you consider the best distance to place the connection which starts the alarm.

The writer declined to make any recommendation for the substitution of the bell alarm for flagmen until your opinion could be obtained.

Very respectfully, etc.,

ADIN B. CAPRON.

OFFICE OF RAILROAD COMMISSIONER,
PROVIDENCE, R. I., Dec. 18, 1894.

HON. ADIN B. CAPRON,

DEAR SIR:—Your favor of 15th inst. received. You ask three questions—*first*, if I approve of the device for a bell alarm at grade crossings; *second*, if I would

recommend it for such crossings as those at Enfield and Georgiaville; *third*, how near the crossing would be the best distance to place the connection which starts the alarm.

The device in use at the Enfield crossing, Smithfield, is the O'Neil crossing alarm; this alarm is recommended in the highest terms by the Railroad Commissioner of Ohio and other States and many of them are in use. For all crossings except in large towns and villages, or where there are large numbers of persons and teams using the crossing, I think it is the best device which has yet come to my attention, and for several years I have been desirous of seeing one put in on some of the roads in this State. I would recommend the adoption of this alarm at such crossings as those at Enfield and Georgiaville. It is impossible to keep persons off the railroad tracks at grade crossings; about all that can be done is to give a good warning to all that a train is approaching. It seems to me that this alarm is more reliable for that purpose than the average flagman, as it will, if kept in proper order, ring for every approaching train or engine, regular or special, day or night, while a flagman may be away from his post or negligent of his duties. Even where gates and flagmen both are used, persons will persist in going under the gates, and in some notable cases, this year, have lost their lives in consequence thereof.

The question as to how far from the crossings the connections to start the alarm should be placed is one that must be decided largely by the circumstances of each crossing. The speed of trains, the amount of travel, and the "openness or blindness" of the crossing are all to be taken into consideration. As a general rule I should say that for ordinary country crossings, the connection should be placed from 2,000 to 2,500 feet from the crossing; this distance may, however, be too far away if the crossing is near a station. If there is any other information that I can give, I shall be pleased to do so.

Respectfully yours,

E. L. FREEMAN,

Railroad Commissioner.

SPECIAL REPORT

OF THE

RAILROAD COMMISSIONERS

OF THE

State of New Hampshire,

MADE TO THE LEGISLATURE DECEMBER 29, 1894.

THE EVOLUTION OF STREET RAILWAYS.

The first street horse car was built by John Stephenson, of New York, and was used upon a road in that city which was opened November 26, 1831, but the development of street railway business was very slow, and it was not until 1856 that the first New England road was constructed in Boston. Street railroads were designed originally for cities of the first class covering large and densely populated areas, in which people were obliged to live long distances from their places of business, and in these they were fairly profitable from the beginning. As their usefulness was gradually demonstrated they were multiplied and extended until most cities and towns of more than 10,000 population and many of less size were supplied with them.

Outside the larger cities these roads were constructed by men who were residents of the towns in which they were located and had in view the development of those towns and the convenience of themselves and their neighbors more than the net earnings of the roads. Many of them undoubtedly expected that street railway accommodation would enhance the value of real estate in which they were interested, but they did not look for large dividends upon their stock, and in many cases when the success of the enterprise had been assured they sold it for a fraction of what it cost.

They helped build street railroads very much as they sometimes contributed to the erection of fountains, the construction of sidewalks, the purchase of statues for the public good. Each took as many shares as he thought he could afford to, not as an investment which was likely to pay directly but as one which would

promote the prosperity of his community. The roads were built and equipped as economically as possible, and they were capitalized within the actual cost. The public as well as their owners regarded them as public improvements rather than as money making enterprises.

Under these circumstances street railway corporations were given all the rights and privileges they asked for, and they asked for more than any other class of profit-sharing corporations ever dared to.

There were furnished free of expense to them roadways and roadbeds, bridges, fences and crossings, were often exempted from taxation, and were permitted to charge for transportation all they could get.

In fact they were authorized to take to their own use almost everything they needed which belonged to the public, and to fix any rates they deemed prudent. This great liberality was justified upon the ground we have stated, that they were public improvements rather than speculative ventures, that every citizen in the town was profited by them, that they could be built nowhere but in public streets, and that they could not be built at all if they were subjected to the same requirements and restrictions as steam roads.

With such concessions they cost comparatively little, and with the increase of population in the towns where they were located, the increase of the incomes of the classes that patronized them and the growth of the riding habit, they in most cases came to be dividend-paying properties which returned to their owners fair rates of interest upon the money invested in them.

In 1887 electricity was first successfully applied upon a commercial street railway in Richmond, Virginia, previous attempts to use it having been experimental only. The next year it had become established that this marvellous agent was to be generally employed in this line of traffic, and since that time the history of street railroading has been a record of changes from horse to electric power and multiplication and extension of electric roads.

The sale of equipment has been from the start the first object of the most active promoters of electric roads.

The sale of the stocks and bonds of all roads has depended very largely upon their length of line.

Much of the actual cost of an electric road is in the power plant, and is little greater for ten miles of track than for five.

The electric car is much more speedy, comfortable, and in other ways attractive than its predecessor. American cities and villages grew more rapidly in 1888–1892 than in any other period. Real estate speculation, especially in suburban districts was at its height. People were everywhere prosperous, and had money to spend in pleasure excursions and outings. All these facts contributed to the extension of old roads into new streets, then into the suburbs, then to pleasure resorts and neighboring villages; and nearly every substitution of electricity was accompanied by a large increase of mileage which was not deemed feasible under the old conditions, and this has gone on until nearly every foot of territory within city limits has been occupied.

For several reasons definite data upon this subject for the whole country cannot be given. The development of the business is so rapid that the facts of yesterday are ancient history to-morrow.

Promoters of street railways find it for their advantage to withhold, as much as possible, exhibits showing their cost, earnings, operating expenses, and financial condition; and in most states there is a lack of laws requiring them to make such returns as are demanded of steam roads.

Fortunately, however, there is one large state in which trustworthy statistics regarding a very extensive street railway development have been obtained, and arranged and published in a clear and comprehensive form by the Railroad Commission.

Massachusetts is gridironed with electric roads, urban, suburban, and interurban, which serve cities and villages of nearly all sizes, centres of trade and manufacturing, places of residence, and pleasure resorts; and which taken together are probably as fairly representative of all in the country, as those of any other state.

According to the report for the year ending September 30, 1893, of the Massachussets commission, there were in operation in that state 60 street railroads with a total length, including double track but not sidings, of 874 miles, an increase of 119 miles during that railroad year.

Of this mileage 711 was electric and 163 horse. The capital stock of the 60 companies was $25,883,575, their funded debt was $15,109,000, and their floating debt $9,597,113, making their total liabilities $49,589,689, an average of $53,985.69 per mile, which was divided as follows: Construction, $26,792, equipment, $15,455.06; land and buildings, $11,738.63.

These computations are upon a single track basis; that is, a mile of line which is double tracked is reckoned as two miles.

The cost of sidings is included; but their length which was 63 miles, is not reckoned. If these be added, the total track mileage in Massachusetts, September 30, 1893, was 937, and the average capitalization per mile was $53,137.

Boston and vicinity are served by the West End road, which has 254 miles of track and a capitalization of about $24,500,000; deducting these from the totals for the state and we have, outside of the West End territory, 620 miles of track, with a capitalization of about $25,000,000, or $40,300 per mile.

The table, at end of this report, showing approximately the growth of street railway enterprises in the several states up to January 1, 1894, is copied from the *Street Railway Journal* of New York, an accepted authority on the subject. The mileage given therein includes double tracks and sidings, one mile of double track being counted as two miles, and sidings as additional length.

Assuming that construction and transformation have progressed this year in the same rate as in 1893 we have now about 12,700 miles of track, of which about 9,000 is electric, 2,500 horse, 670 cable, and 500 steam.

The cable and elevated steam roads are found only in the largest cities outside of New England. Their cost, capitalization, and earnings are many times those of any electric or horse roads. One of them is capitalized at $717,700 per mile, another at $643,500, and none of them at less than $100,000.

The electric and horse roads are as a rule capitalized much higher per mile of track in large towns than in smaller ones, partly because they cost more and partly because they can carry more water in the stock market For these reasons the figures do not apply closely to such roads as New Hampshire is interested in,

but the Massachusetts averages are perhaps not far from those of the whole country. They are at least as near as any we have, and in view of the fact that every equipment of a street road for electricity increases its liabilities, it appears safe to conclude that when all roads have been thus improved they will represent an average capitalization even higher than that stated here.

The steam roads for which returns were made to the Interstate Commerce Commission in 1893 had a total length of 169,779.84 miles and their total capitalization was $10,506,285,410, an average of $63,421 per mile of line, of which a little less than one half was represented by stock and the remainder by bonds and miscellaneous obligations.

These roads operated 10,051 miles of second track, 912 miles of third track, 668 miles of fourth track, and 40,451 miles of sidings and yard track, a total of 221,863 miles of track, the average capitalization of which was $47,354 per mile.

In other words the capitalization of the steam railways of the country, with their enormously expensive roadways, roadbeds, terminals, stations, bridges and fences, (none of which enter to any great extent into the cost of a street railway), with their monstrous locomotives, palatial coaches and almost numberless freight cars, and with the great volume of water which has been injected into their stock, is but $47,354 per mile of track and but $63,421 per mile of line, as against $40,300 per mile of track for street railways outside the great cities, and $53,985 per mile of track for the whole country.

FINANCING.

The character of street railroading as a business has been changed as radically as the method of moving cars. Syndicates controlling vast sums of money have acquired the franchises of the original stockholders and in too many cases have used them for the purpose of realizing enormous profits at the expense of the public in the briefest possible time. They have bought and built roads, not with a view to their profitable operation, but to sell them at exorbitant prices by disposing of the stocks and bonds.

Many of these syndicates are organizations within corporations whose business it is to make and sell electrical appliances, and others are composed or controlled by speculators in suburban fields and pastures which it is desired to convert into house lots. Their first source of profit is in the sale of equipment or of lands, and following this is the proceeds of the sale of all the securities that can be disposed of. Their business is financing, not railroading. Their aim is to get what money they can and get away, leaving it to others to attempt the impossible task of making the roads earn fixed charges and dividends. In this they have been wonderfully successful.

The mystery which attaches to the generation and use of electricity and the concealments which have surrounded the construction and operation of electric railways have greatly aided in the placing of their securities.

Because marvellous results have been obtained by electricians, the idea has prevailed that nothing was beyond the reach of their skill and that a railroad of their invention could so create business and reduce the cost of doing it that it could pay upon almost any capitalization.

Given a franchise covering a large town or two small contiguous ones, a map

showing their size, actual and imagined, a table giving their population, present and prospective, and an ingenious calculation of receipts and expenses, and it has been entirely practicable to sell securities to at least double the actual value of the road considered with reference to its earning power, and this has been done in every section of the country.

No one needs to be told that when the average liabilities of ordinary street railways are in excess of $40,000 per mile of track, more than one-half the amount is water.

An expert railroad statistician has recently said that the actual cost of street railways including the fabulous prices paid for their franchises, for which the public receives nothing, does not exceed their indebtedness which about equals their stock. In other terms, that for every dollar that has been invested in these properties another dollar has gone into the pockets of promoters and brokers.

With franchises at their original cost, free, and equipment, track, and labor at the present greatly reduced prices, it is safe to say that the entire electric railway system of the country could be replaced for one-third its nominal cost.

With the roads capitalized in this way it follows that the public must pay much more than it should be asked to pay for services, or that holders of stocks and bonds must be deprived of the income that has been promised them, even when construction has been kept within lines that should be profitable. When it has been pushed into sections where there is no business to warrant it, in order to boom the price of building lots, or make a favorable showing of mileage to investors, the result is still worse and the financial wreckage of the near future is certain to be largely composed of the remains of such roads.

Indeed, we do not need to wait for the collapse of many of these enterprises. In the West and South there is widespread bankruptcy in street railway ventures and a number of roads or sections of roads which were pushed from business centres out into prairies and forests for the purposes stated above have already been abandoned, within two or three years of the date when the first cars rolled over them.

Even in the populous and conservative East many electric railway corporations are insolvent and others are staggering under enormous financial loads which they have assumed.

COST AND EARNING POWER.

It is yet to be demonstrated that the application of electricity necessarily increases the dividend earning power of a street railroad. It invariably adds to the gross receipts, but it involves such outlays for construction, equipment, and operation, that only in rare instances has it enlarged the percentage of profit. Comparison instituted by the Massachusetts commission shows that since 1888, in which year all the street roads in that state were operated by horse power, the net earnings per passenger have increased 62 per cent., the net earnings per car mile, 73 per cent , the net earnings per mile of road, 57 per cent., the cost per mile of road, 60 per cent., and the capitalization per mile, 65 per cent.

During the last five years these roads have paid to the stockholders an average of 6.44 per cent., which is a little less than one per cent. more than was paid for five years, prior to 1888, but in order to do this, an average surplus of 12 per

cent. which was maintained before the introduction of electricity, has been drawn upon until it has nearly disappeared.

There is reason, too, for believing that the apparent profits have been more matters of book-keeping than of real balances, having been obtained by leaving out of account depreciation of the plant and wear of machinery.

As the first electric roads are but six years old, their tracks, equipment, and power plants are all new, and outlays for repairs and renewals have been very small, but during the next decade most of these will have to be replaced at great expense, which if it is charged to operating expenses, will wipe out a large share of the percentage of net earnings shown in the past, unless business is rapidly increased or the cost of power is greatly reduced.

Edward S. Higgins, a New York expert of wide reputation, has recently published in the *Street Railway Journal*, a series of articles upon the intrinsic value of street railways, in which he bases his conclusions upon an exhaustive analysis of the cost, capitalization, operating expenses, gross receipts, and net earnings of representative roads before and since the adoption of electricity. He groups these roads in seven classes, according to the population of the cities and towns which they serve, as follows:

Class I. Roads in places of less than 15,000 inhabitants.
Class II. Roads in places of from 15,000 to 25,000.
Class III. Roads in places of from 25,000 to 50,000.
Class IV. Roads in places of from 50,000 to 100,000.
Class V. Roads in places of from 100,000 to 500,000.
Class VI. Roads in places of over 500,000.
Class VII. Interurban roads.

Writing of street railway properties grouped in this way last January Mr. Higgins, after an exhaustive discussion of the statistical exhibits of several roads in each group, reaches these conclusions which, while they are based upon a very brief experience, as all calculation in this field must be and are at best only general estimates which would not apply closely to any particular road, are worth considering in the absence of more definite information.

Class I. There are about 500 cities, towns, and boroughs in the United States of from 5,000 to 15,000 inhabitants. Of this number over 300 now contain local or are served by interurban street railways, about 120 having been invaded in 1893. Many of the smaller places, too, have street railway facilities, although few of less than 5,000 are served by strictly local roads.

"The equipment of these small roads by electricity has sometimes—but by no means always—improved the financial outlook. Gross receipts have always increased and frequently in a very large ratio—100, 200, even 300 per cent. This is the natural result of radical improvements in service and of the novelty of electric traction. But it has been, and is now, difficult to crowd operating expenses to a point where returns can be regularly made on the necessarily increased capitalization. 'Electricians' are costly (sometimes in more ways than one). The fixed expenses of a power station, when distributed over but three, four, or five cars, frequently make the cost of motive power excessive; nor can this charge

be greatly reduced by hiring power from local lighting stations. In small towns the latter rarely operate more than six to eight hours out of the twenty-four for lighting service. In order to furnish power to an electric railway they must add new engines, boilers, special dynamos and apparatus, and must employ another set of men. The light saving in general expenses per unit output is more than counterbalanced by the profit necessarily charged by the lighting company. Depreciation of track is greater with electric operation than with horses, and the cost of maintaining the earlier types of electric motors has been disheartening. Nor can we forget that all the items of the profit and loss account are on so small a scale, that a single accident causing loss of life or limb may result in successful damage suits, entirely wiping out a year's net earnings.

"The evil of overcapitalization was almost wholly absent in the horse railways of this class, but is decidedly present in their electric successors of to-day, though with a better excuse for being than is always the case with larger systems. In the early days of electric railroading when manufacturing and construction costs were a well guarded mystery, high prices for apparatus and for all kinds of contract work were demanded, particularly when the contractors were obliged to take part payment in bonds. A great majority of the smaller roads could be financed only in this way, and were burdened with heavy interest charges hard to meet even at first, with road and equipment comparatively new, and presumably in the best condition for profiable operation. Defaults have already occurred, and must be expected henceforth with greater and greater frequency.

"While the above discussion applies to the great majority of roads serving less than 15,000 inhabitants, there are many cases which seem to be, and a few which actually are, exceptions to the rule. When a population of from 12,000 to 15,000 is scattered along a narrow territory, such as a valley or river front, and if there is constant necessity for travel between the different parts of the district, an electric, or even a horse, railway will occasionally show true profits on the actual cost of construction. Even so, however, there can be little margin for mistakes of management or for accidents, both of which are a constant menace to net receipts. Again, a 'summer road' situated in a small town, but serving a much larger transient population bent on pleasure, is frequently profitable on a moderate scale; but such roads evidently do not properly belong in this class. In still other cases local conditions favor larger gross and net earnings than the average."

Class II. There are ninety-one cities and towns in the United States of from 15,000 to 25,000 inhabitants.

Fifty-seven of these cities are located in the Eastern states, twenty-one in the Central, nine in the Southern, and four in the Western. All but ten have local street railway systems. Eight of the ten are connected with larger metropolitan systems, and street railways are projected in two not yet served. The total track mileage exceeds 1,000, of which about 80 per cent. is electric, 16 per cent horse, and the balance steam and miscellaneous.

"1. A large majority are capitalized at from two to three times the *present* cost of duplicating their tangible assets. This has been done by several methods, one of which has been already described, that of purchasing apparatus and equipment at the high prices of early days, and for bonds.

"2. A majority of the roads are, and will probably be in future, unable to permanently earn the interest on their mortgage indebtedness. This conclusion is not wholly justified by the tables alone, since it would appear that many of the roads there shown have no trouble as yet in meeting fixed charges, while others, though less successful, have not been in operation by electricity long enough to derive the full benefit of the change. Nevertheless, when we remember that the charges for maintenance will increase from year to year as the new track and equipment wear out in service, and when we realize how small are the totals of net earnings, we cannot but fear that the latter will gradually dwindle to the point of disappearance.

"3. Few of the entire number will be able to earn a 5 per cent. dividend on their capital stock after meeting true operating expenses and fixed charges.

"4. None of the securities are worth the consideration as investments of other than local capitalists, who may be able to give personal time and care to the management of the properties."

There are thirty-five cities in the United States having a population of from 25,000 to 35,000 by the census of 1890. Twenty-one are in the Eastern states, seven in the Southern, six in the Central, and one in the Western. All are served by extensive and well developed street railway systems. The total track mileage now exceeds 2,000, of which 75 per cent. is operated by electricity, 10 per cent. by horses, and the balance by various systems of motive power.

"1. Properly developed and well managed electric railway systems in manufacturing cities and towns of this class, operating under average conditions, and giving a service of from 10 to 12 car miles per capita, should be able to earn about $2.50 gross per capita, and from $6,000 to $7,000 per mile of road. Under exceptionally favorable circumstances, or where a large summer traffic can be developed by special attractions, the passenger income may exceed this figure.

"2. Electric railway systems of this size cannot be permanently maintained and operated, except under rarely favorable conditions at less than 75 per cent. of the passenger income.

"3. Assuming, therefore, that the safe net income will be 25 per cent. of the gross, we obtain $0.625 as the net income per capita reasonably to be expected. This is 5 per cent. on $12.50, which is the measure of the total investment per capita permissible to the street railways of this class, if overcapitalization of earning power is to be avoided. Now it is easily possible to build and equip electric railway systems in cities of this class (at the rate of, say, one mile of track for each 2,500 inhabitants served) for a cash expenditure at present prices of somewhat less than $12.50 per capita. For example, a twelve-mile street railway system in a city of 30,000 inhabitants can be built in most cases for about $250,000. It should be able to earn $75,000 gross and $18,750 net. The return on the investment would be, therefore, about 7.5 per cent., and this is roughly the average intrinsic earning power of the properties of this class.

"4. Finally, it may be said in general that investors should refuse to consider any small electric railway proposition which does not involve: (a) The service of a present population of at least 25,000 inhabitants; (b) a traffic necessity for at least 5 miles of track and 5 cars; (c) the direct service of a population not less than 3,000 per mile of track; (d) the free gift, without burdensome conditions,

of a franchise running for thirty years or more; (e) the privilege of using a roadbed construction costing, ready for service, not more than $7,500 per mile of track."

Class III, *b*. There are thirty-one cities in the United States having a population of from 35,000 to 50,000 by the census of 1890. Twenty are in the Eastern states, five in the Western, three in the Central, and three in the Southern. The total track mileage now exceeds 1,000, of which 75 per cent. is operated by electricity, 13 per cent. by horses, and the balance by various systems of motive power.

"1. American cities of from 40,000 to 50,000 inhabitants will usually patronize a well managed electric street railway system, 12 to 18 miles in length, to the extent of from $3.50 to $4.50 per capita of passenger income. One or two Western cities of this size are earning over $5 per capita gross on exceptionally large street and car mileage.

"2. If it were possible to construct these electric railway properties anew, according to the best engineering practice of the present day, they could be operated in most cases at from 70 to 75 per cent. of the passenger income. Unfortunately, however, many of the roads have purchased early or inferior apparatus and material; and the operating expenses cannot be kept down to these figures, but will probably average at least 80 per cent. of the passenger income.

"3. Under the most favorable conditions of operation a net earning power of $1 per capita is a reasonable expectation of profit; but 75 cents per capita is, and will be, a more usual figure.

"4. Seventy-five cents per capita is a return of 5 per cent. per annum on capital liabilities of $15 per capita, and of 7.5 per cent. on capital liabilities of $10 per capita, the latter figure representing about the average cost of building and equipping electric railway systems of from 12 to 18 miles in length in cities of this size. One dollar per capita—which represents the approximate net earning power of a perfectly constructed and equipped street railway system in cities of this size—is equivalent to a 10 per cent. return upon the actual cost of its construction (apart from franchises), and it may be said, therefore, that the electric railway properties of this class are intrinsically 10 per cent. investments."

Class IV. There are thirty cities in the United States having a population of from 50,000 to 100,000 by the census of 1890. Twenty-two are in the Eastern states, four in the Southern, three in the Central, and one in the Western. The total track mileage is nearly 1,600, of which 81 per cent. is operated by electricity, 15 per cent. by horses, and the balance by various systems of motive power.

"1. Well managed electric street railway systems, of from 25 to 40 miles in length in the best American cities of from 50,000 to 100,000 inhabitants, will probably develop a maximum earning power of from $5 to $6 gross per capita, with one or two exceptional cases rising above these figures. A large number will earn from $4 to $5 per capita, and few will be unable to earn $4 per capita.

"2. Those properties which have been improperly constructed and equipped, particularly in the matter of roadbed, cannot probably be permanently operated at less than 75 per cent. of the passenger income, higher figures rather than lower being probable. Those properties which have postponed equipment until a

comparatively recent period, and which have been carefully and thoroughly built, can usually be operated at from 65 to 70 per cent. of the passenger income.

"3. Under the most favorable conditions of operation a maximum net earning power of about $2 per capita is possible, but more usual figures will range from $1 to $1.50 per capita.

"One dollar and a half per capita is a return of 12 per cent. per annum on capital liabilities of $12.50 per capita, which represents about the average present cost of building and equipping in the most perfect manner electric railway systems of average length in cities of this class, where the cost of taking up and replacing pavement forms an important item of original investment. In general, therefore, it may be said that these properties are, intrinsically, investments returning from 10 to 15 per cent. on the actual value of tangible assets apart from franchises."

Class V. There are twenty-four cities in the United States having a population of 100,000 to 500,000 by the census of 1890. Fifteen are in the Eastern states, six in the Central, two in the Western, and one in the Southern. The total track mileage exceeds 3,000, of which about 65 per cent. is operated by electricity, 20 per cent, by horses, 10 per cent. by cable, and the balance by other systems of motive power.

"1. The magnitude of the interests involved in handling the street railway properties of this class will insure the continued employment of the best managing ability obtainable; and the interests of the security holders will be, in this repect, carefully and thoroughly protected.

"2. Animal motive power will soon disappear entirely in the cities of this class, and will be replaced chiefly by the overhead electric system, unless further improvements in the science of transportation be made. Existing cable lines will continue in use on streets where the density of traffic is very great; but it is possible that little or no additional cable mileage will be built, on account of the large initial cost of construction, as compared with that of the electric system.

"3. When the process of conversion to improved systems of motive powers shall have been completed in the cities of this class, a few exceptional street railway systems will be able to earn from $10 to $15 per capita by the cultivation of traffic in every possible manner. Nearly all of the remainder will develop an earning power of from $7.50 to $10 per capita, and few will fall below $7.50 per capita.

"4. Many of these properties have been slow in adopting new rapid transit methods, and are fortunate in profiting by the experience of those earlier in the field. The electric railways may hope to operate, therefore, at from 65 to 70 per cent. of the passenger income; and the cable railways at a somewhat smaller ratio, owing, not so much to a lower cost of operation per car mile, as to a larger passenger income per car mile.

"5. A net earning power of from $2.75 to $3.50 per capita, with occasional figures slightly larger than these, may be expected.

"6. Such net earnings are equivalent to a return of from 15 to 25 per cent on the actual net cost of duplicating the tangible assets of the railway systems under consideration. The cost of track construction and paving in the crowded streets of these cities ranges from $15,000 to $30,000 per mile of track according to the

amount of paving required by the city. The investment required for equipment is proportionately larger, on account of the greater number of cars per mile of track necessary for properly handling the traffic; and the actual cash cost of building and equipping new electric railway systems in these cities will rarely be less than $50,000 per mile of track, and may easily be somewhat more. The cost of building and equipping cable roads varies within wide limits, on account of interference with water and gas pipes, etc., but is rarely less than $100,000 per mile of track. Bearing in mind then the statements previously made, that these systems are operating from 100 to 150 miles of track, it is seen that, while capital liabilities of from $15 to $25 per capita are not unreasonable, larger amounts may well be regarded with suspicion."

Class VI. There are four cities in the United States having a population of over 500,000 inhabitants by the census of 1890, and another whose rich and populous suburban district brings it within this class. The total track mileage in these five population centres exceeds 1,800, of which about 70 per cent. is operated by horses, 13 per cent. by electricity, 7 per cent. by the cable system and 9 per cent. by steam (elevated),

"The properties of this class are among the safest and most profitable in the entire range of capital investment. Defaults in interest charges are almost unknown, and dividends on stocks have been, with few exceptions, regular and satisfactory, in spite of extreme over-capitalization of cost. So well recognized are these facts that the securities are, as a rule, closely held by 'insiders,' and have not, at least until recently, formed an important feature in stock exchange transactions."

Class VII. Interurban and through line street railways are very recent enterprises, and it is impossible to speak with any certainty as to the results or probabilities in this comparatively unknown field, but in Mr. Higgins's opinion: There can be no question that in thickly settled manufacturing and residence territory, a network of lines connecting the various settlements will be well patronized for both pleasure and business reasons. It is only since the introduction of improved forms of motive power that "pleasure riding" has become so important a source of street railway revenue. There is no reason why it should not increase in years to come, particularly through the country districts served by interurban roads.

Nevertheless, a great many doubtful interurban "schemes" are being urged upon capital in these latter days. The great difficulty with many of the projects is that they are building too much mileage for the possible patronage It cannot usually be wise, for example, to build a line through ten or fifteen miles of farming country in order to connect a village of 2,000 inhabitants with a town of 5,000 by a fifteen minute schedule—an extreme case, perhaps, but one which we can easily find paralleled in recent prospectuses.

Of a somewhat different character are the more ambitious projects for connecting important cities 100 miles or more apart by a system of electric railways which shall develop a large local and pleasure traffic en route, with little expectation of through business. Such roads come in direct conflict with existing steam railways, and naturally arouse their bitter opposition. From the steam railway

point of view it does not seem quite fair for the local authorities to grant to the electric railway companies the free use of costly highway systems built at the expense of the public, when the steam railways have been obliged to purchase their rights of way and to assume heavy burdens for expense of grading, bridges, viaducts, etc. This is especially an injustice also if the right to carry freight shall also be granted to companies operating upon the public highways, and if the attempt is made to obtain such rights on any large scale we may expect a "war of corporations" of the most bitter and determined nature.

THROUGH LINES.

Having occupied nearly every city in the country the promoters of electric railways are now turning their attention to through lines, which will parallel and compete for the business now done by the steam roads, and during the past year many syndicates have been formed for the purpose of securing urban roads already in operation, and connecting and extending them so as to practically duplicate some of the principal steam lines which now connect our great cities. One of the most ambitious of these has in hand an electric road from Philadelphia to Harrisburg with branches to most of the important cities of Pennsylvania which will be 366 miles in length, including fifty miles already constructed and in operation.

Another aims to unite New York and Philadelphia by an electric system, touching many points in New Jersey, and calling for 150 miles of track, of which seventy are already laid.

Two electric roads are being built from Baltimore to Washington, a distance of about 40 miles, and the attempt to construct an air line from Chicago to St. Louis, a distance of 250 miles, is now revived.

These and many other similar projects are backed by all necessary money, courage, and push, and are certain to materialize in the near future. They are designed not only for the transportation of passengers, but freight, express, and mails, and to be in all respects competitors of the steam roads whose tracks they parallel, except possibly in handling heavy freight.

SURFACE ROADS.

The proprietors of some electric roads have deemed it for their advantage in locating their lines through sparsely settled country districts where land is cheap, to abandon the highways and secure roadways of their own, so that theirs are, strictly speaking, surface rather than street roads. And it is probable that this course will commend itself to some extent to the engineers of through lines Not only this, but long distance electrics like that between St. Louis and Chicago, upon which it is proposed to run trains at a very high rate of speed, must be constructed upon graded and carefully built road-beds, which will doubtless correspond very closely to those of the steam roads. But it is not practicable in this discussion to draw distinctions between these and other electric railways, which are confined to the streets.

THE VALUE OF FRANCHISES.

The substitution of electric for other power upon street railways, involved the sacrifices of most of the property represented in their construction and equipment

accounts, but it enhanced immensely the value of their franchises which carried with them to the electric syndicates all the rights, privileges, and immunities that had been granted to the weak and unpromising corporations to which they were given as an inducement to supply the public with cheap carriage in city streets.

Many of these franchises were exclusive and perpetual or for a long term of years. They gave their owners an absolute and indefeasible monopoly in the territory to which they applied, the right to confiscate to their own use, public property and freedom from the restrictions which were imposed on all other railroads, and they were very valuable.

Two illustrations which are not altogether exceptional, will serve to show what the right to do the things which street railways are privileged to do by their charters, is deemed to be worth by the promoters of electrics.

Within a year a street railroad in San Francisco, in the construction and equipment of which three million dollars were expended, has been sold for eighteen millions, and it was asserted at the time that it would have brought that amount if it had not had a dollar's worth of tangible assets. It was the franchise that was bought.

It is notorious that the owner of a New Hampshire street railway has been repeatedly offered and refused for his road two hundred and fifty thousand dollars, of which, more than two hundred thousand must be for a franchise that was given outright to his neighbors of whom he bought it upon the eve of the electric period.

So it will be found in almost every instance, where the ownership of a street railway in a city of 40,000 people or more has changed hands, and electric motors have taken the place of horses, a very large share of the liabilities incurred by the new proprietors is for franchises which were granted gratuitously by the public, upon the supposition that no one could afford to pay anything for them, and that they were in the nature of a necessary contribution by the municipality for the purpose of securing public improvements.

RESTRICTION AND REGULATION.

In most states street railway corporations have been organized under general laws, and have not been compelled to ask legislatures for special charters.

These laws were framed to meet the requirements of the horse-car period. As a rule they were very liberal and very elastic. They have permitted the occupation of streets and the construction of tracks by whoever first saw fit to make the venture. They have practically put no limit to the issue of stock and bonds, and they have reserved to the state very little in the way of regulation.

As street railways were originally purely local institutions, it was deemed proper that municipalities in which they were located should have such control of them as it was thought necessary the public should exercise, and it was left to the local authorities to locate them, prescribe conditions as to the use of the streets, and in some cases to regulate their charges. In brief, the state legislatures gave them authority to do whatever boards of aldermen and selectmen would assent to, and the terms they obtained depended to a great extent upon the character of these officials and the influence the railroad managers had with them, and were very different in different places. In some cities they were per-

mitted to take the middle of the street, in others they were located outside the travelled portion of the highway. In some they were compelled to pave and keep in repair the space used by them, in others no such condition was imposed. In some they had to remove snow and ice, in others this was done at the expense of the public. In a very few, maximum rates of fare were established by the authorities. Consequently when the roads in several contiguous places were united and made into one line, one section of it had one set of regulations and restrictions, the next another, and the third still another, but neither had very many or very rigorous ones to comply with, for the same spirit of liberality which shaped the policy of legislatures in granting franchises controlled city governments in the exercise of the powers conferred upon them.

With the development of the electric road, and its absorption, consolidation, and extension of the horse-car lines, its enormous aggregation of capital, and its use of the immense power which the control of such capital gives and the greed of its managers dictates, it has become apparent that the laws which were sufficient for protection are now entirely inadequate, and repeated attempts have been made to substitute other codes which would subject these enterprises to the same control that has been found necessary in dealing with steam roads.

Such attempts have not often succeeded. The desire of the public to secure electric road facilities, the natural hostility of electric road owners to any curtailment of their privileges and powers, and the pliability of legislatures, have generally sufficed to defeat any movement in that direction, and it is an unquestionable fact that the street railway of the present, though in most cases a complete monopoly, and the creation of concession and gratuity from the public, is subject to less legal restraint than any other corporation.

Barring its liability to municipal control, which is rarely troublesome, it may do what its owners please.

The state does not assert its right to regulate a creature which exists by its decree and grows upon its bounty.

If there are exceptions to this they are to be found in Massachusetts and New York, where considerable progress has been made in the enactment of street railway laws adapted to the new conditions.

DAMAGE TO STREETS.

The benefits which electric roads confer upon the public are not secured without heavy offsets, among which are common accidents resulting in the loss of limbs and lives, the obstruction of streets with unsightly poles and annoying wires, and the spoiling of highways for carriage use. Few if any of our thoroughfares are wide enough to carry the tracks of a street road without interfering with the passage of pleasure and business vehicles drawn by horses, and if they were, a road on which one is liable at any time to meet or be passed by a trolley-car is a road to be avoided by those who drive spirited horses.

In the winter, in our climate, the country roads cannot be cleared of snow as they must be cleared in order to permit an electric car to run, without destroying them for driving purposes, and even in summer a first-class driveway and a railway track cannot be made to occupy the same ground. These are necessary evils which cannot be prevented.

Beyond this is the matter of grade crossings upon which street cars pass over the tracks of steam roads. They are the most dangerous of grade crossings, and constantly put in jeopardy all street car passengers who are carried over them.

Wherever it is possible they should be avoided, and where this cannot be done they should be carefully protected by gates or flagmen and the enforcement of the most stringent rules regarding their use.

THE OHIO IDEA.

Ohio is engaged in experiments designed to test what appears to be a popular theory in the farming sections of that state, that the public should construct, control, and operate the street railways, thereby securing to the people not only cheap and agreeable transportation but all the advantages which are elsewhere voted to corporations in the shape of franchises.

The legislature of 1894 enacted several laws authorizing towns and counties to issue five per cent. bonds for the purpose of placing upon the highways "iron or steel tracks suitable for the passage of electric cars or cars propelled by inanimate power, which tracks shall be and remain a part of the public road and a part of the public property the same as bridges or other road improvements."

When said roads are completed the township trustees or county commissioners are authorized and empowered to fix a rate of toll of so much per car mile for each and every car or wagon passing over said tracks or in lieu of toll to fix an annual rental which shall not be more than five per cent. of the bonds issued.

Provision is made for the levy of a tax to create a sinking fund for the redemption of the bonds at maturity, and the trustees of the townships through which the roads pass are empowered to make regulations for the use of the tracks.

The object, as we understand it, is to furnish at the public expense electric or other street roads on which the public may transport passengers and freight by paying the actual cost of the haul plus enough to keep the track in repair.

NEW HAMPSHIRE STREET ROADS.

New Hampshire has now five street railways, of which three, the Manchester, Nashua, and Laconia, are operated by horse power, and the other two, the Concord and Dover, by electricity. Arrangements are being made to convert the Manchester and Nashua roads into electrics.

The two electrics are interurban and both parallel steam roads, the Dover between that city and Somersworth, and the Concord between the central wards of that city and Penacook.

All these roads have passed by the processes described above, from the ownership of the many people who furnished their original capital into the control of financiers. The stock of the Manchester road is, with the exception of six shares, owned by one man. Another man holds a controlling interest in the stock of the Dover, and the Nashua has just been sold to a foreign syndicate. The Concord and Laconia are now in the hands of a few recent purchasers.

The Manchester road has 10.17 miles of track. Its capital stock is but $25,000; it has no funded debt, and its unfunded liabilities are but $60,585. It carried last year 1,585,832 passengers, earned $81,627.15, of which $4,721.29 was net income, and paid its four stockholders seven per cent. dividends.

The Nashua road has 10.5 miles of track. Its capital stock is but $20,000, and its debt $161,659. It carried last year 560,901 passengers and earned $29,994.89, which was $4,157.35 less than its operating expenses. Its deficit for the year, including interest, was more than $12,000.

The Concord road is 11 miles long. Its capital stock is $100,000, of which one-half is preferred, and its funded debt is $100,000. Its earnings last year were $43,787.51, its operating expenses $32,988.85, and its interest account $5,057.95. It paid six per cent. dividends on the preferred stock, and carried $2,749.61 to surplus.

The Dover road is 6.5 miles long. It is capitalized at $150,000, and has a funded debt of $100,000. Some months ago it passed into the hands of a receiver, its stock is worthless, and its bonds of doubtful value.

The Laconia road is 3.4 miles long. It is capitalized at $50,000, and has an unfunded debt of $4,400 above its surplus. It carried last year 206,473 passengers, and earned net $2,418. Its stockholders received five per cent. dividends.

These five roads meet the requirements of the five largest cities in the state and of another smaller one. They occupy nearly all the territory in the state which can be made to furnish profitable business to purely local roads, and whatever remains is covered by charters already granted but not yet used.

New charters are therefore likely to be asked for, only with a view to the construction of interurban or through lines connecting two or more cities or towns, and future construction will in all probability be mostly by foreign capitalists. Further development of street railways by our own citizens, with their own money, for the purpose of securing to themselves and their neighbors' needed facilities, is not to be confidently looked for.

CONCLUSIONS.

The electric road has come to stay and be extended and perfected. The advantages it offers, rapid transit, cheap and delightful journeying, railway communications for communities to which they cannot be afforded by any other method, will command for it public approval, and capitalists to which it offers an unlimited field for investment and speculation, will construct it wherever there is business to warrant.

The prediction that within the next decade it will supersede the steam road for passengers, mails, expresses, and light freight may be extravagant, but it is by no means as much so as a foretelling of what has actually been accomplished since would have been regarded a decade ago.

No conservative prophet is safe in front of an electric motor. In many of the states, street railways have been restricted by their charters or general laws to a passenger business, but there are at present about 60 roads which have a freight service, 40 of them operating special cars for that service, more than 60 which carry mails, and 35 which do an express business, and the tendency everywhere is toward the removal of all statutory limitation of the business which this class of carriers may do, and capitalists who operate in this field base their plans upon a free competition with the steam roads in all lines of railway transportation. Legislation upon the subject should therefore be predicated upon the same theory, and legislators in this state should have in mind not merely the street

road which has supplanted the omnibus, but the electric through line which aims to rival in power and importance, in variety and volume of business, the great systems along which are planted our towns and cities.

In the absence of general laws authorizing the formation of street railway corporations, the seizure of highways, the issue of securities, and the exercise of the other powers which such organizations have secured elsewhere, we have escaped many of the difficulties which beset other states in dealing with the question. Only special charters have been granted, and these have been confined to one or two towns No through line can be built and no great combination of existing lines effected without the authority of the legislature.

We are therefore in a position to impose such conditions as may be necessary to protect the public and secure for the people the advantages to which they are entitled, in return for the immensely valuable privileges which they will be asked to confer upon these corporations.

Assuming that the street railway of the future is to be an electric, that it is to be built and financed by capitalists, probably from other states, for the sole purpose of making money, that it is to have at its command abundant cash, credit, courage, and cunning, that it will be dominated by the same selfishness and shrewdness that characterize the management of great corporations generally, we must welcome and encourage it, and at the same time prescribe such conditions as are fair and prudent.

It is vastly easier to do this than it would be to wrest abused advantages from corporations and combinations which had preëmpted the ground under general laws and appropriated to themselves the concessions and exemptions which it was thought proper to make to the small and weak associations that constructed the horse railroads. We can make our own terms without violating any agreements, express or understood, or withdrawing anything that has been granted. We have little to undo.

Experience elsewhere, though brief, while it may not show how the dangers which are incident to the development of street railway systems are to be successfully guarded against, suggests what these dangers are and how important it is that they should be considered at the beginning. The most prominent are these:

(1) *The construction of roads which cannot secure business enough to support them and which must be abandoned; in other words, roads for which there is no public exigency.*

The appropriation of public or private property or rights by corporations can be justified only upon the grounds that the public good requires it, and before it is authorized it should be determined by a competent tribunal whether such an exigency exists as will warrant it. In other words, no railway corporation should be permitted to convert to its own use any highway until it has been judicially settled that the advantages it will confer upon the people will at least balance the burdens it aims to impose upon them, and that such advantages cannot be secured at less cost in any other way.

If the promoters and builders of street railways were the real parties in interest after the roads are completed, there would be little danger that rails would be laid where they are not needed, and cannot be made to earn expenses; but while

these railways are a device to sell electric equipment, outlaying lands, stocks and bonds, they are more than liable to be pushed into territory which cannot support them; and when this has been demonstrated, to be abandoned to the great disappointment and serious damage not only of their real owners, but of all who located upon their lines. It is to be noted that the law which prohibits the abandonment of a railroad is entirely inoperative in these cases. When a foreign syndicate has built a street road into the wilderness or over a plain, issued and sold stock and bonds to a large amount, paid itself out of the proceeds several times over the cost of the road, and gone away leaving the unfortunate security holders to discover how badly they have been victimized, it amounts to little to say to them that they are legally bound to continue to operate the line. They are powerless to comply with the law and the real offenders are beyond its reach.

(2) *The acquirement by corporations of the right to take and use without compensation direct or indirect, the highway which the public has been taxed to pay for and must be taxed to maintain.*

In discussing this matter in its report for 1892 the board said: "If electric roads are to do a general railroad business, for the pecuniary benefit of their owners, we see no reason why they should not be subject to all the requirements that are imposed upon other roads engaged in exactly the same business, or why they should be given exclusive, and very valuable, rights and privileges in the highways, to the discomfort and damage of the public; and before it is too late, we hope to see established in New Hampshire, the rule that all railroads which are designed to do a through business from one town to another, shall keep out of the public thoroughfares, pay for the land they occupy, and build their own bridges, fences, and stations."

We see no reason for retracting or modifying this. Leaving out of the consideration the question of the vested rights of the steam railroads and the obligation of the state to treat them fairly, so long as they do the business they were chartered and are prepared to do in a satisfactory manner and at reasonable rates, there is no valid argument in favor of giving to other corporations the right to take without compensation the property of the public or of individuals. Why should the legislature vote outright to ten men a street railway franchise which is worth $200,000, because it carries with it an exclusive right to seize and use without pay the streets, which have been built and must be maintained at the expense of the fellow citizens of those men?

Why should one road which carries passengers, merchandise, and mails up and down the Merrimack valley be compelled to buy its right of way, build its roadway, bridges, and fences, and another which parallels and does exactly the same business be furnished with all these things at the public expense, when the only difference between the two is in the power which moves their trains?

It may be answered that the public good demands an electric railway in this city or that, and that it can be had only by using the streets, that an electric road from the Massachusetts line to Lake Winnipesaukee will be a great public convenience, that others between other points will furnish railway facilities where none can be secured by other methods; but this in no way controverts the proposition that electric railway companies should be compelled to make fair compen-

sation for the privilege granted in their charters, either directly, by the payment of a gross sum at the beginning, or a tax upon their receipts, or indirectly by low charges for transportation. If it be held that it is impracticable for the state to sell franchises outright, or to tax railway earnings, the right to regulate rates should be vigorously asserted.

(3) *The over capitalization of street roads.*

That street railways should be constructed and equipped as economically as may be and capitalized within their actual cost is apparent enough, and it is nearly as clear that those who own and control them should furnish a fair share of the money. Over capitalization is robbery of somebody, generally of stockholders, who are deprived of a fair income upon their investment, and of the public, which must be charged excessively in order to meet fixed charges.

A road which cost $15,000 and sells securities at the rate of $45,000 per mile, must earn, net, three times as much as it should or the purchasers of the stocks and bonds must fail to get fair interest upon their money. So, too, a road which is financially represented by $20,000 in stock, the owners of which control it, and $200,000 in bonds, the owners of which have no voice whatever in the management, is a financial monstrosity, which constantly invites mismanagement if not downright dishonesty.

We need a rigid law to prevent over capitalization in any form, and another absolutely prohibiting the issuing of bonds to a greater extent than the amount of stock actually paid in.

(4) *The abandonment by the state of the right to regulate the operation of street roads, including their charges.*

So far as is practicable the regulation of street railways should be uniform; they should have the same privileges and be subject to the same restrictions which in the main should be such as experience has shown are needed to prevent extortion and unjust aggression by the steam roads. As suggested above the day when they could be considered merely as local enterprises, the creatures of a generous public spirit, designed for the advantage of patrons rather than builders and therefore entitled to liberal gratuities and exemption from legislative control or be safely left to the regulation of local authorities, has gone by.

In no case should the state part, even temporarily, with its right to fix the terms upon which they exist and regulate their operation and charges. It may perhaps be prudent to concede to the towns and cities through which they run the privilege of controlling them in matters which are purely local, such as their location and the details of their construction, but in whatever concerns the general public the authority of the state should be retained and exercised.

The principle that special legislation should be avoided when desired results can be obtained by the enactment of general laws applies here. A general law authorizing the construction of street or surface roads wherever they are actually needed and can be made to pay and providing safeguards against the abuse of the public in their financing, construction, and operation, is, it seems to us, far preferable to special charters whose terms depend not upon the real merits of each case so much as upon the audacity, skill, and pertinacity of the grantees.

We would therefore recommend the passage of a general law broad enough to make it unnecessary and unwise for the legislature to grant a special charter in any case. We do not deem it expedient for us to attempt to draft such law in detail but in our judgment it should,—

(1) Authorize the organization of street railroad corporations by some simple and easy method, and the construction of such roads wherever and whenever they are needed, by whoever will furnish the necessary means.

(2) Provide an impartial and competent tribunal to determine the question whether the public good demands the construction of a proposed road and to fix the compensation, if any, for the use of the highways.

(3) Confer upon the towns and cities through which a road runs the authority to locate it, prescribe the character of its construction, and, in cases where it is confined to one town or city, the method of its operation.

(4) So far as is practicable exclude such roads from the travelled highways in country districts and secure to the public directly or indirectly compensation for the property and privileges which are granted them.

(5) Protect grade crossings.

(6) Declare that failure to operate a street road shall be a forfeiture of its franchise; and,

(7) Prohibit fictitious capitalization, the sale of securities for less than their par value, and the contraction of debts in excess of the amount of capital stock actually paid in.

COMPARISON OF THE MILEAGE AND CARS OF

FOR THE YEAR ENDING

1893.

STATES AND TERRITORIES.	HORSE.		ELECTRIC.		CABLE.		STEAM.		TOTAL.	
	Miles.	Cars.	Miles.	Cars.	Miles.	Cars.	Miles.	Cars.	Miles.	Cars.
Alabama	36	92	79	144	...	.....	148	112	263	348
Arizona	5	4	5	3	....	.....	....	...	10	7
Arkansas	38	85	35	95	....	.....	5	1	78	181
California	231	706	251	403	156	630	49	79	687	1,828
Colorado	7	7	163	327	30	232	15	4	215	570
Connecticut	107	417	72	158	....	.....	....	....	179	575
Delaware	6	22	13	56	....	.....	....	...	19	72
District of Columbia	57	324	56	107	22	389	....	....	135	820
Florida	28	55	5	10	....	.....	....	...	33	65
Georgia	34	89	213	306	...	.....	28	27	275	422
Idaho	.....	.....	3	2	....	.....	....	....	3	2
Illinois	343	3,389	396	805	86	863	4	2	828	5,059
Indiana	92	167	173	402	....	.....	8	14	273	583
Iowa	34	56	232	431	7	34	18	19	291	540
Kansas	54	111	108	160	...	.....	11	22	173	293
Kentucky	98	280	130	413	....	.....	....	....	228	693
Louisiana	98	334	50	103	....	.....	9	36	157	473
Maine	28	52	48	93	....	.....	....	....	76	145
Maryland	59	262	110	267	37	809	2	4	208	743
Massachusetts	219	1,968	616	2,184	....	.....	6	13	841	4,165
Michigan	51	206	249	637	....	.....	9	11	309	854
Minnesota	10	16	319	778	11	80	....	....	340	874
Mississippi	21	54	.....	....	....	.....	6	10	27	64
Missouri	43	183	324	1,078	108	1,114	22	30	482	2,405
Montana	.....	.....	60	67	2	4	2	5	66	76
Nebraska	52	91	160	297	6	36	....	....	208	424
New Hampshire	22	50	24	39	....	.....	....	....	46	89
New Jersey	167	669	202	500	1	2	8	15	378	1 186
New York	629	4,275	758	2,215	39	408	12	36	1,438	6,934
North Carolina	5	7	30	53	....	.....	7	7	42	67
Ohio	69	157	556	1,785	44	322	4	8	673	2,272
Oregon	7	8	91	173	8	23	31	39	137	243
Pennsylvania	522	1,812	687	1,278	70	324	4	6	1,284	3,420
Rhode Island	68	353	51	89	3	58	....	....	122	500
South Carolina	34	93	12	6	...	.....	....	....	46	99
South Dakota	17	16	9	7	....	.....	6	2	32	25
Tennessee	23	50	202	332	....	.....	73	57	298	439
Texas	99	205	278	365	....	.....	32	29	409	599
Utah	.....	.....	86	128	....	.....	15	10	101	138
Vermont	10	19	5	8	....	.....	....	...	15	27
Virginia	26	89	120	181	....	.....	4	4	150	274
Washington	7	8	221	250	27	77	16	5	271	340
West Virginia	13	19	34	85	....	.....	....	....	47	104
Wisconsin	23	33	230	419	....	.....	12	9	265	461
Wyoming	5	11	.....	.....	....	.....	....	....	5	11
Total	3,497	16,845	7,476	17,233	658	4,805	566	616	12,174	39,509

STREET RAILWAYS IN THE UNITED STATES

DECEMBER 1892 AND 1893.

1892.

HORSE.		ELECTRIC.		CABLE.		STEAM.		TOTAL.	
Miles.	Cars.	Miles.	Cars.	Miles.	Cars.	Miles.	Cars.	Miles.	Cars.
60	157	40	65	.....	.....	150	119	250	341
6	4	.....	.....	.....	.....	.....	.....	6	4
42	90	27	78	.....	.....	5	2	74	870
254	587	205	264	157	637	45	69	661	1,557
20	30	152	273	43	300	.....	.....	215	603
103	370	49	111	.....	.....	.....	.....	152	481
6	22	13	50	.....	.....	.....	.....	19	72
54	267	45	87	22	389	.....	.....	121	743
28	53	5	10	.....	.....	10	5	43	68
59	103	160	236	.....	.....	16	11	235	350
.....	.....	3	2	.....	.....	.....	.....	3	2
365	3,193	316	584	85	568	10	10	776	4,355
91	172	157	371	.....	.....	8	14	256	557
54	113	193	421	7	34	14	17	268	585
59	119	68	91	2	4	34	63	163	277
133	333	84	252	.....	.....	.....	.....	217	585
119	442	5	8	.....	.....	33	36	157	486
28	75	41	87	.....	.....	.....	.....	69	162
133	439	67	94	10	35	2	4	212	572
267	1,729	524	2,037	.....	.....	6	10	797	3,776
68	380	209	513	.....	.....	15	11	292	904
10	16	314	710	11	29	.....	.....	335	755
21	54	.....	.....	.....	.....	6	10	27	64
70	458	321	1,040	108	1,079	12	20	511	2,597
.....	.....	60	67	2	4	5	5	67	76
59	183	150	238	6	22	.....	.....	215	443
28	70	23	25	.....	.....	.....	.....	51	95
119	436	88	265	3	7	8	20	218	728
848	5,895	455	1,272	13	73	28	37	1,344	7,277
5	7	33	56	.....	.....	4	5	42	68
204	436	538	1,566	44	197	4	4	790	2,203
19	39	62	108	13	45	35	43	129	235
688	1,931	484	923	70	334	.....	.....	1,242	3,188
67	410	51	65	3	14	.....	.....	121	489
38	99	.....	.....	.....	.....	.....	.....	38	99
17	16	9	7	.....	.....	6	2	32	25
26	56	197	319	.....	.....	71	99	294	464
150	263	249	307	.....	.....	32	31	431	611
.....	.....	84	112	.....	.....	16	10	100	122
13	20	.....	.....	.....	.....	.....	.....	13	20
30	84	97	138	.....	.....	16	14	143	236
7	8	195	226	29	75	19	7	250	316
21	30	33	51	.....	.....	10	20	64	101
66	115	120	286	.....	.....	.....	.....	186	401
5	11	.....	.....	.....	.....	.....	.....	5	11
4,460	19,315	5,989	13,415	646	3,971	620	698	11,634	37,274

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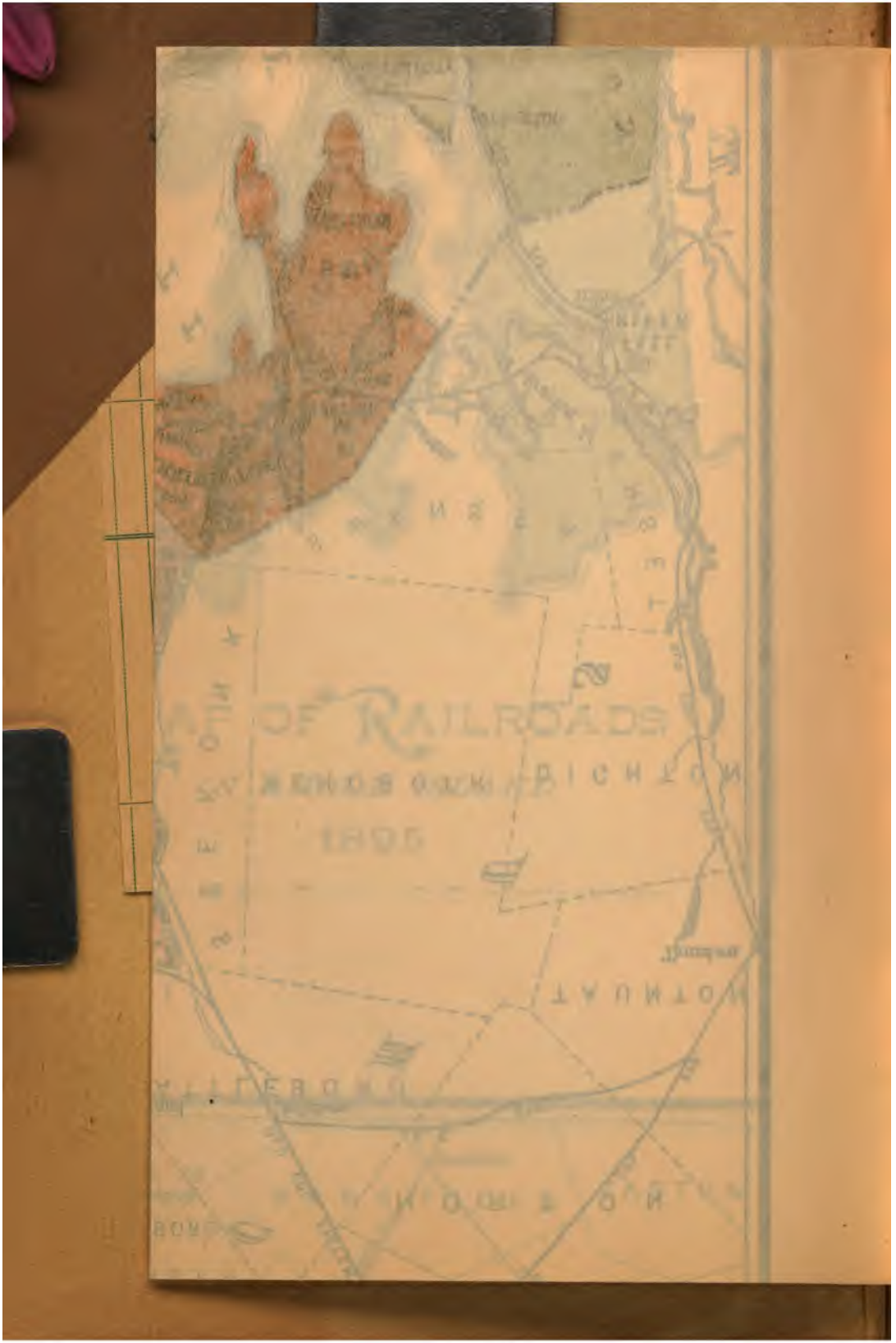
OF RAILROADS

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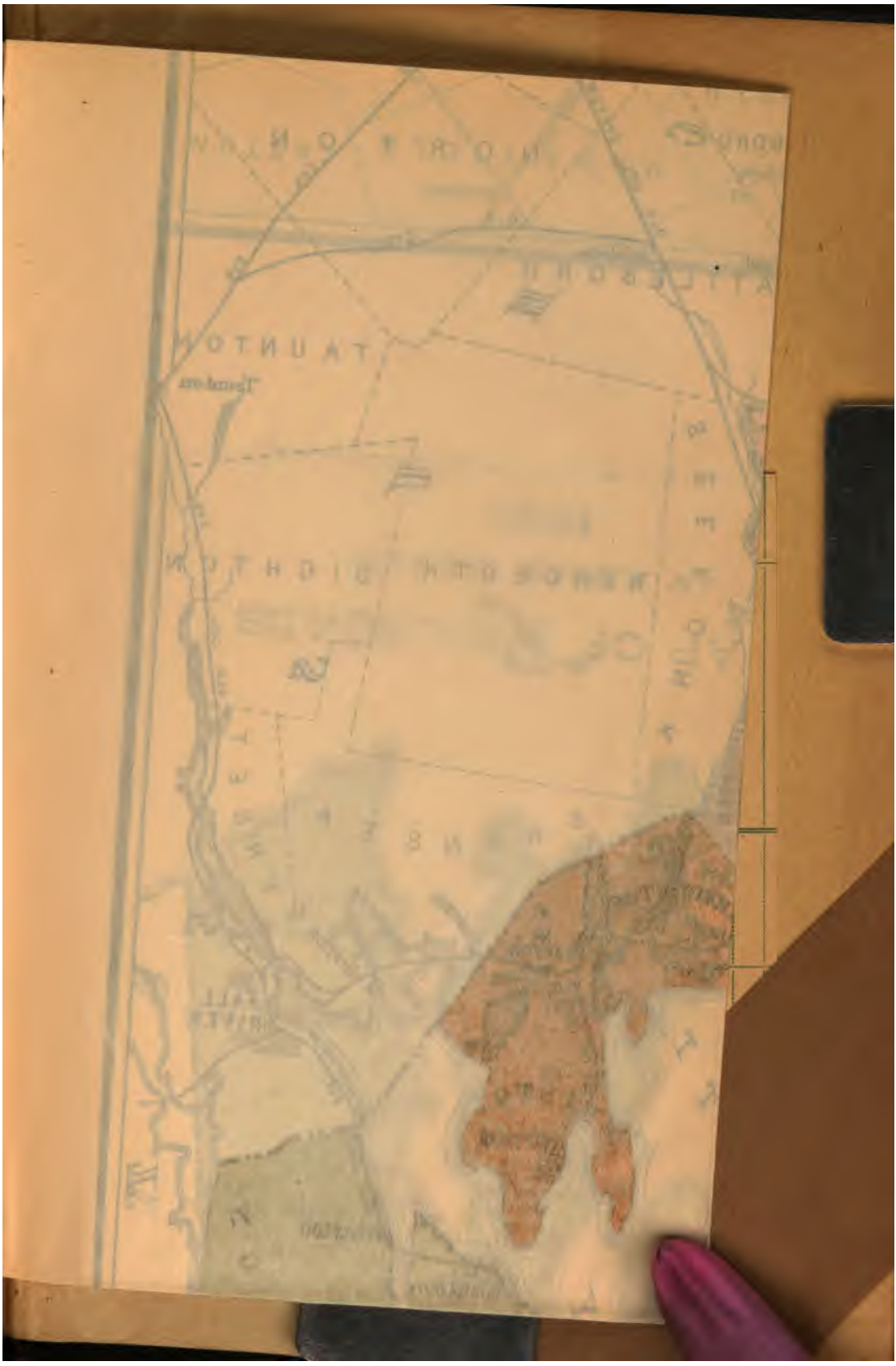

192843
385.374 Rhode Island. Railroad commissioner.
R475 Annual report. 1894

NAME	DATE	NAME	DATE